

PRESENTED BY

*The University.*











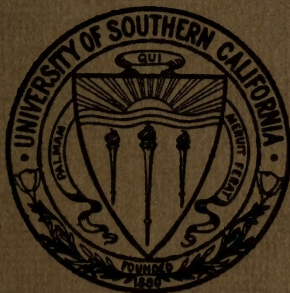


215H1 UNIVERSITY OF  
SOUTHERN CALIFORNIA  
BULLETIN

VOLUME X

MARCH 1915

NUMBER 1



YEAR BOOK *for* 1914-1915





UNIVERSITY OF  
SOUTHERN CALIFORNIA  
BULLETIN

VOLUME 11      MARCH 1915      NUMBER 1

YEAR BOOK  
UNIVERSITY OF SOUTHERN CALIFORNIA  
1914 - 1915

YEAR BOOK for 1914-1915

WITH ANNOUNCEMENTS FOR

1915-1916

PUBLISHED BY THE UNIVERSITY OF SOUTHERN CALIFORNIA

PRINTED AND BOUND BY THE UNIVERSITY OF SOUTHERN CALIFORNIA, JULY 15, 1915

Los Angeles, California

YEAR BOOK  
UNIVERSITY OF SOUTHERN CALIFORNIA  
1914-1915

# UNIVERSITY OF SOUTHERN CALIFORNIA BULLETIN

VOLUME X

MARCH 1915

NUMBER 1



## YEAR BOOK *for* 1914-1915

WITH ANNOUNCEMENTS FOR  
1915-1916

1915

PUBLISHED BI-MONTHLY BY THE UNIVERSITY  
ENTERED AS SECOND CLASS MATTER UNDER ACT OF CONGRESS, JULY 16, 1894  
LOS ANGELES, CALIFORNIA



Printed by the  
University of Southern California Press  
3474 University Avenue  
Los Angeles

# TABLE *of* CONTENTS

CALENDAR .....	6
DIRECTORY .....	8
THE UNIVERSITY: HISTORY AND GOVERNMENT	
The Faculties.....	15
THE COLLEGE OF LIBERAL ARTS:	
The Undergraduate Courses.....	40
The Graduate Department.....	58
Departments of Instruction.....	67
Engineering .....	139
General Information.....	155
The Summer Session.....	175
THE COLLEGE OF PHYSICIANS AND SURGEONS:	
General Statement.....	183
Departments of Instruction.....	203
THE COLLEGE OF LAW:	
General Statement.....	240
Departments of Instruction.....	246
THE COLLEGE OF DENTISTRY:	
General Statement.....	260
Departments of Instruction.....	269
THE COLLEGE OF THEOLOGY:	
General Statement.....	285
Departments of Instruction.....	288
THE COLLEGE OF PHARMACY:	
General Statement.....	296
Departments of Instruction.....	299
THE COLLEGE OF ORATORY.....	312
THE COLLEGE OF MUSIC.....	317
THE COLLEGE OF FINE ARTS.....	322
THE UNIVERSITY HIGH SCHOOL.....	328
CATALOGUE OF STUDENTS.....	343
INDEX .....	410

378.794

U5H1

379614  
Withdrawn

# CALENDAR

1915

## Summer Sessions

June 14	Monday	Summer Session begins, Medicine. Law.
June 28	Monday	Summer Session begins, Liberal Arts, Fine Arts.
Aug. 6	Friday	Summer Session ends, Liberal Arts.
Aug. 7	Saturday	Summer Session ends, Law.
Aug. 21	Saturday	Summer Session ends, Fine Arts.
Sept. 10	Friday	Summer Session ends, Medicine.

## Regular Sessions

Sept. 6	Monday	Instruction begins, Music.
Sept. 13	Monday	Entrance and Special Examinations and Registration begin, Arts, Medi- cine, Law.
Sept. 16	Thursday	Instruction begins, Arts, Medicine, Law, Oratory.
Sept. 20	Monday	Instruction begins, Fine Arts.
Oct. 1	Thursday	Registration begins, Dentistry.*
Oct. 4	Monday	Registration begins, Pharmacy.
Oct. 6	Wednesday	<b>The University Founders' Day Cele- bration.</b>
Oct. 6	Wednesday	Dentistry, Opening Assembly, 8 p. m. Instruction begins, Dentistry, Phar- macy.
Oct. 11	Monday	Registration begins, Theology.
Oct. 15	Friday	Registration of Students closes for the year, Dentistry.
Nov. 25	Thursday	} <b>The University Thanksgiving Recess.</b>
Nov. 26	Friday	
Nov. 27	Saturday	
Dec. 18	Saturday	<b>The University Christmas Recess be- gins (1:00 p. m.)</b>

\*Dentistry, examinations for the removal of conditions, October,



1916

Jan. 4	Tuesday	<b>University Christmas Recess ends.</b> Second Trimester begins, Medicine.
Jan. 20	Thursday	Mid-Year Examinations begin, Theology.
Jan. 24	Monday	Second Semester begins, Theology. Mid-year Examinations begin, Fine Arts.
Jan. 25	Tuesday	Mid-Year Examinations and Registration for Second Semester begin, Law.
Jan. 27	Thursday	Mid-Year Examinations begin, Arts, Oratory.
Jan. 31	Monday	Second Semester begins, Fine Arts.
Feb. 1	Tuesday	Registration for Second Semester begins, Arts, Oratory. Second Semester begins, Law.
Feb. 3	Thursday	<b>The Day of Prayer for Colleges.</b> Second Semester begins, Arts, Oratory.
Feb. 7	Monday	Mid-Year Examinations begin, Pharmacy.
Feb. 22	Tuesday	<b>The University Washington's Birthday Recess.</b>
Mar. 6	Monday	Third Trimester begins, Medicine.
Mar. 27	Monday	} Spring Vacation, Liberal Arts, Theology, Pharmacy, Oratory.
Apr. 1	Saturday	
May 8	Monday	Final Examinations begin, Liberal Arts, Pharmacy, Oratory, Fine Arts.
May 15	Monday	Freshman and Junior Examinations begin, Dentistry. Final Examinations begin, Law.
May 22	Monday	Final Examinations begin, Theology.
May 30	Tuesday	<b>The University Memorial Day Recess.</b>
May 31	Wednesday	Final Examinations begin. Liberal Arts, Pharmacy, Oratory, Fine Arts.
June 4	Sunday	<b>The University Baccalaureate Sunday.</b> Graduating Exercises, University High School.
June 7	Wednesday	<b>The University Commencement Day.</b>
June 8	Thursday	Alumni Reunions and Banquets.

## DIRECTORY

### THE COLLEGE OF LIBERAL ARTS

Thirty-fifth Street and University Avenue.

### THE GRADUATE DEPARTMENT

Thirty-fifth Street and University Avenue.

### THE COLLEGE OF PHYSICIANS AND SURGEONS

516 East Washington Street.

### THE COLLEGE OF LAW

Tajo Building, First Street and Broadway.

### THE COLLEGE OF DENTISTRY

Sixteenth and Los Angeles Streets.

### THE COLLEGE OF THEOLOGY

Thirty-fifth Place and Hoover Street.

### THE COLLEGE OF PHARMACY

Thirty-fifth Street and University Avenue.

### THE COLLEGE OF MUSIC

Blanchard Hall.

Branch Office, 35th St. and University Ave.

### THE COLLEGE OF ORATORY

Thirty-fifth Street and University Avenue.

### THE COLLEGE OF FINE ARTS

201 North Avenue 66.

### THE UNIVERSITY HIGH SCHOOL

Thirty-fifth Street and University Avenue.

### THE MARINE BIOLOGICAL STATION

Venice, California.

# THE UNIVERSITY

## HISTORICAL

In response to a general feeling that the interests of Christian education demanded the establishment of an institution of higher learning in Southern California, plans were early matured which resulted in the founding, in the City of Los Angeles, of the University of Southern California. On July 29, in the year 1879, the original deed of trust was executed by Ozro W. Childs, Isaias W. Hellman, and John G. Downey, donors, to A. M. Hough, J. P. Widney, E. F. Spence, M. M. Bovard, G. D. Compton, and R. M. Widney, as Trustees. On August 8 of the following year, 1880, the incorporation of the University was effected under the title, "The University of Southern California." The name of the corporation has since been changed to "University of Southern California."

The first Board of Directors consisted of eleven persons, namely: A. M. Hough, Charles Shelling, E. F. Spence, P. Y. Cool, S. C. Hubbell, E. S. Chase, P. M. Green, J. G. Downey, R. M. Widney, J. A. Van Anda, and F. S. Woodcock. These, together with the trustees and the original donors of the trust, may be fairly held to represent the founders of the University. The corporation as at present constituted consists of thirty Trustees.

The Articles of Incorporation provide that the Trustees shall be elected by the Southern California Annual Conference of the Methodist Episcopal Church.

The first building was erected on the present campus site in 1880, and on October 4 of the same year the institution was formally opened for the reception of students, and the work of instruction was begun. Men and women are admitted to all departments of the University on the same conditions. Although requiring no particular religious faith of its instructors and students, the institution, in accordance with the fundamental aim of its founders, stands for the effective promotion of Christian culture.

## THE GOVERNMENT OF THE UNIVERSITY

The government of the University is committed to a Board of thirty Trustees. This Board has the power to elect professors and other officers of instruction, to confer degrees, to manage the property of the University Corporation, and to determine the general policy of the institution.

The President has charge of the educational administration of the University and is chairman of the University Council. The principal administrative officers, other than the President, are the Deans, who have immediate charge of the work of the several faculties.

The University Council is a representative body, consisting of the President, and the Dean and the Secretary (or some other member of the faculty) of each of the several colleges. It is the duty of the Council to consider the courses offered by the several colleges with a view to increasing the efficiency and enlarging the range of University work, to encourage original research, to adjust all questions involving more than one of the colleges, and to advise the President upon such matters as he may bring before it.

## THE ORGANIZATION OF THE UNIVERSITY

The University includes the following colleges, each of which has a distinct faculty of instruction:\*

THE COLLEGE OF LIBERAL ARTS.

THE COLLEGE OF PHYSICIANS AND SURGEONS.

THE COLLEGE OF DENTISTRY.

THE COLLEGE OF LAW.

THE COLLEGE OF THEOLOGY.

THE COLLEGE OF PHARMACY.

THE COLLEGE OF MUSIC.

THE COLLEGE OF ORATORY.

THE COLLEGE OF FINE ARTS.

THE MARINE BIOLOGICAL STATION.

THE UNIVERSITY HIGH SCHOOL.

---

\*Information concerning any of the colleges, and yearbooks containing the courses of study, etc., will be mailed upon application to the registrars of the various colleges. See Directory.

## ADVANTAGES OF LOCATION.

Los Angeles is the metropolis of Southern California. Its population of about 500,000 represents every State in the Union and many foreign lands. Its importance as a political and metropolitan center gives the students of the University unusual opportunities for observation and investigation along many lines, both cultural and professional.

The climate throughout the year is such that tourists from every quarter come to spend a part of the year, and many return to make this their permanent home.

It is the greatest railroad center on the Pacific Coast. Four transcontinental lines are now complete. A network of electric roads connects the city with the numerous beaches, mountain resorts, and outlying towns. These are reached by delightful journeys through orange groves and orchards of the semi-tropical fruits characteristic of the region.

It is known as the Convention City of the West. Every year brings large bodies of people here for the discussion of every kind of public interest known to science, politics, religion, and the humanities. These great conventions afford the student an excellent opportunity to study the subjects of their discussion; and the resident population of the city is sufficiently large to afford important advantages for the study of sociology and kindred subjects.

The diverse viewpoints of the groups of students in the nine colleges make their association an important cultural factor in their lives.

The University campus is in close proximity to Exposition Park, in which more than a million dollars have been recently expended in erecting and equipping buildings and beautifying the grounds. The State Building contains exhibits of the products, mineral and vegetable, of the various counties of the State. The Museum of History, Science and Art contains the valuable collections of The Historical Society of Southern California, The Academy of Sciences, The Cooper Ornithological Society, The Fine Arts League of Los Angeles, and numerous private collections. Because of their easy access, these collections afford special advantages to the students and faculties of the University.

The fifty-five acres of the park athletic grounds are available and afford ample facilities for all outdoor sports.



# OFFICIAL BOARDS

## THE BOARD OF TRUSTEES

### Term Expires in 1915

JULIAS A. BROWN.....	2277 Hobart Blvd.
GEORGE W. COULTAS, A.B., S.T.B.....	Whittier, Cal.
GEORGE L. HAZZARD, A.M.....	Whittier, Cal.
EZRA A. HEALY, A.M., D.D.....	841 W. 35th Place
GAIL B. JOHNSON.....	Pacific Mutual Bldg.
THOMAS H. OXNAM*.....	211 Cambridge St.
WILLIAM D. STEPHENS.....	1108 W. 27th St.
FRANCIS Q. STORY.....	Alhambra, Cal.
STEPHEN TOWNSEND.....	Long Beach, Cal.
ALBERT J. WALLACE, LL.D.....	Union Oil Bldg.

### Term Expires in 1916

ALVAH W. ADKINSON, A.M., D.D.....	2129 W. 20th St.
WESLEY W. BECKETT, M.D.....	Pacific Mutual Bldg.
GEORGE FINLEY BOVARD, A.M., D.D., LL.D.....	University
WILLIAM M BOWEN, LL.B.....	Washington Bldg.
HENRY W. BRODBECK, D.D.S.....	Van Nuys Bldg.
JOSEPH E. CARR.....	Los Angeles Investment Bldg.
PRESCOTT F. COGSWELL.....	El Monte, Cal.
B. C. COREY, A.M.....	155 N. Sichel St.
ALFRED INWOOD, D.D.....	1053 W. 36th St.
ALBERT J. WALLACE, LL.D.....	Union Oil Bldg.

### Term Expires in 1917

BISHOP EDWIN HOLT HUGHES, D.D., LL.D.....	San Francisco
GEORGE I. COCHRAN, A.M., LL.B.....	Pacific Mutual Bldg.
WILLIAM F. CRONEMILLER.....	936 S. Alvarado St.
JOHN B. GREEN, A.B., D.D.....	527 Exchange Bldg.
EDWARD P. JOHNSON.....	211 Security Bldg.
WILL A. KNIGHTEN, D.D.....	Sawtelle, Cal.
FRANCES M. LARKIN, Ph.D.....	San Francisco, Cal.
CHARLES A. PARMELEE.....	744 S. Carondelet
A. E. POMEROY, A.M.....	700 Grant Bldg.
FRANK G. H. STEVENS, A.B.....	Pasadena, Cal.

**Note**—Where no other city or town is mentioned, the address is understood to be Los Angeles.

\*Deceased Feb. 16, 1915.

Officers of the Board

Ezra A. Healy.....	President
Stephen Townsend.....	Vice-President
A. E. Pomeroy.....	Secretary
George I. Cochran.....	Treasurer and Financial Agent

Executive Committee

Ezra A. Healy	Joseph E. Carr
Stephen Townsend	J. B. Green
George I. Cochran	George L. Hazzard
George F. Bovard	Albert J. Wallace
W. M. Bowen	A. E. Pomeroy
Julius A. Brown	W. F. Cronemiller

BOARD OF CONTROL OF DEPARTMENT OF LAW

George F. Bovard, A.M., D.D., LL.D.....	University
George I. Cochran, A.M., LL.B.....	Pacific Mutual Bldg.
Gavin W. Craig, LL.M.....	Hall of Justice
Thomas W. Robinson, A.M.....	Hall of Records
Frank M. Porter, A.B., LL.M.....	Tajo Bldg.
Hartley Shaw, Ph.B.....	Stimson Bldg.
A. J. Wallace, LL.D.....	Union Oil Bldg.

ADVISORY COUNCIL, MARINE STATION

George Finley Bovard, A.M., LL.D.....	University
George I. Cochran, A.M.....	Pacific Mutual Bldg.
Ezra A. Healy, A.M., D.D.....	841 W. 35th Place
Abbott Kinney.....	Venice, Cal.
Walter Lindley, M.D., LL.D.....	2007 S. Figueroa St.
General M. H. Sherman.....	Hotel Westminster
Arthur B. Benton.....	114 N. Spring St.

**ADVISORY BOARD, COLLEGE OF PHARMACY**

Charles W. Bryson, M.D.....	401 Delta Bldg.
L. N. Brunswig.....	Brunswig Drug Co.
F. W. Braun.....	The Braun Corporation
L. D. Powers, M.D.....	City Hall
W. R. Dickinson.....	Dean Drug Co.
J. J. Freeman.....	10th and Grand Ave.
Henry Blumenberg.....	Sun Drug Co.
A. J. Neve.....	Owl Drug Co.

**VISITING COMMITTEES OF THE CONFERENCE**

College of Liberal Arts—C. V. Cowan, Geo. R. Graff, H. I. Rasmus.
College of Physicians and Surgeons—C. B. Allen, S. W. Carnes, W. L. Y. Davis.
College of Law—J. W. Neely, E. W. Pasko, R. J. Taylor.
College of Dentistry—M. G. Wenz, J. A. Wood, Chas. Wentworth.
College of Oratory—H. E. Murkett, W. E. Tilroe, L. D. Van Arnam.
College of Pharmacy—H. C. Gibson, E. Sedweek, F. J. Seaman.
College of Music—J. E. Fischer, Mott Mitchell, B. D. Snudden
College of Theology—G. W. Goodell, B. A. Johnson, Eli McClish.
College of Fine Arts—D. F. Howe, S. J. McConnell, R. E. Wright.

**OFFICERS OF THE ALUMNI ASSOCIATION**

Roy Malcom, A.M., Ph.D.....	President
457 North Serrano Avenue	
Edna Agnes Cocks, A.B.....	Vice-President
701 West Thirty-sixth Street	
Edna Georgina Bovard, A.B.....	Secretary
801 West Thirty-fourth Street	
Everett Warren Mattoon, A.B.....	Treasurer
1400 Mahantonga Way	
Hugh Carey Willett, A.M.....	Historian
921 W. Thirty-seventh Place	

# OFFICERS *of* ADMINISTRATION *and* INSTRUCTION

## OFFICERS OF ADMINISTRATION

GEORGE FINLEY BOVARD, D.D., LL.D.  
President. On the Gaylord Hartupée Endowment

GEORGE I. COCHRAN, A.M., LL.B.  
Treasurer and Financial Agent

JAMES HARMON HOOSE, A.M., Ph.D.  
Vice-Chairman of the Faculty of Liberal Arts

THOMAS BLANCHARD STOWELL, Ph.D., LL.D.  
Chairman of the Graduate Council

CHARLES WILLIAM BRYSON, A.B., M.D.  
Dean of the College of Physicians and Surgeons.

FRANK MONROE PORTER, A.B., LL.M.  
Dean of the College of Law

LEWIS EUGENE FORD, D.D.S.  
Dean of the College of Dentistry

EZRA ANTHONY HEALY, A.M., D.D.  
Dean of the College of Theology

LAIRD JOSEPH STABLER, M.S., Ph.C.  
Dean of the College of Pharmacy

WALTER FISHER SKEELE, A.B.  
Dean of the College of Music

WILLIAM LEES JUDSON  
Dean of the College of Fine Arts

BEULAH WRIGHT,  
Dean of the College of Oratory

ALBERT BRENNUS ULREY, A.M.  
Director of the Marine Biological Station

HUGH CAREY WILLETT, A.M.  
Principal of the University High School

CORA MAUD DYAR,  
Secretary to the President and Acting Registrar

ROBERT JOHN COYNE, A.B.  
Field Secretary

WARREN BRADLEY BOVARD,  
Assistant Financial Agent



**THE FACULTIES****THE COLLEGE OF LIBERAL ARTS**

LAIRD JOSEPH STABLER, M.S., Ph.C.....1120 W. 30th St.  
Professor of Applied Chemistry and Metallurgy.

JAMES HARMON HOOSE, A.M., Ph.D., LL.D.....  
.....1121 W. 31st St.  
Professor of Philosophy.

MARGARET GRAHAM BORTHWICK, A.B.....  
.....929 W. 35th St.  
Professor of the German Language and Literature.

ALBERT BRENNUS ULREY, A.M.....1435 W. 23rd St.  
Professor of Biology and Director of the Marine  
Biological Station.

BEULAH WRIGHT.....344 St. Andrews Place  
Professor of Oratory and Dramatic Art.

PAUL ARNOLD, Ph.M.....1241 W. 47th St.  
Professor of Mathematics.

ROY EDWIN SCHULZ, A.B.....Alhambra  
Professor of the Spanish Language.

FESTUS EDWARD OWEN, A.M.....621 W. 34th St.  
Professor of Philosophy and Psychology.

JAMES MAIN DIXON, A.M., L.H.D., F.R.S.E. ....  
.....427 N. Ardmore Ave.  
Director of Oriental Studies and Professor of Literature.

KATHERINE TORRANCE FORRESTER.....Pasadena  
Professor of the Spanish Language and Literature.

TULLY CLEON KNOLES, A.M.\*.....Bishop, Cal.  
Professor of History.

EDGAR MAXMILIAN von FINGERLIN, Ph.D.....  
.....Santa Monica  
Professor of the Italian and French Languages and  
Literatures.

JOHN GODFREY HILL, A.M., S.T.B., Ph.D.....  
.....854 W. 35th Place  
Hazard Professor of the English Bible and Philos-  
ophy.

---

\*On leave of absence.

- ROCKWELL DENNIS HUNT, A.M., Ph.D.....Inglewood  
Professor of Economics and Sociology.
- ARTHUR WICKES NYE, B.S., M.E.....843 S. Ardmore Ave.  
Professor of Physics and Electrical Engineering, and  
Director of the Laboratory.
- CHARLES WALTER LAWRENCE, B.S., C.E.....  
.....1203 W. 36th Place  
Professor of Civil Engineering.
- THOMAS BLANCHARD STOWELL, A.M., Ph.D.,  
LL.D. ....832 W. 35th Place  
Professor of Education.
- GILBERT ELLIS BAILEY, A.M., Ph.D.....  
.....9728 Figueroa St.  
Professor of Geology.
- ROY MALCOM, A.M., Ph.D.....457 N. Serrano Ave.  
Professor of American History and Government.
- ALLISON GAW, A.M., Ph.D.....1259 W. 35th St.  
Professor of the English Language and Literature.
- RUTH WENTWORTH BROWN, A.M.....2659 Romeo St.  
Professor of the Latin Language and Literature.
- WILLIAM LEES JUDSON.....201 S. Avenue 66  
Professor of Art and Design.
- EMORY STEPHEN BOGARDUS, A.M., Ph.D.....  
.....1205 W. 37th St.  
Professor of Sociology and Economics.
- LEROY SAMUEL WEATHERBY, A.M., Ph.D.....  
.....1299 W. 37th Drive  
Professor of Chemistry.
- JOHN HAROLD MONTGOMERY, M.S., E.E.....  
.....1319 W. 37th Place  
Professor of Physics and Electrical Engineering.
- PAUL SPENCER WOOD, A.B.....1159 W. 37th Drive  
Professor of the English Language and Literature.
- LAWRENCE MELVILLE RIDDLE, A.M.....  
.....1437 S. Flower St.  
Professor of the French Language and Literature.

- FRANK JOSEPH KLINGBERG, A.M., Ph.D.....  
 .....1443 W. 37th Drive  
 Professor of Modern European History.
- ANDREW CREAMOR LIFE, A. M.....1370 W. 36th Place  
 Associate Professor of Botany.
- GERTRUDE COMSTOCK, Ph.B.....685 S. Witmer St.  
 Associate Professor of Interpretation.
- HUGH CAREY WILLETT, A.M.....921 W. 37th Place  
 Principal of the University High School and Asso-  
 ciate Professor of Mathematics.
- ELIZABETH YODER.....1313 W. 8th St.  
 Associate Professor of Dramatic Art and Expression.
- LEONARD GUSTAVE NATTKEMPER, A.B.....  
 .....1253 W. 37th Drive  
 Associate Professor of Oratory and Public Speaking.
- HOWARD LESLIE LUNT, A.M.....5300 Pasadena Ave.  
 Associate Professor of English Language and Literature.
- LESLIE F. GAY, JR., A.M.....2889 Idell St.  
 Associate Professor of History.
- BERTHA JOSEPHINE JACOBY-KIENLE, A.M.....  
 .....1088 W. 31st St.  
 Associate Professor of German.
- CLARENCE WESTGATE COOK, A.B., B.S.....  
 .....5932 Woodlawn Ave.  
 Associate Professor of Civil Engineering.
- BENJAMIN F. STELTER, Ph.D.....3025 S. Vermont Ave.  
 Associate Professor of the English Language and Literature.
- SAMUEL RITTENHOUSE, Ph.D.....227 Juliet St  
 Associate Professor of Zoology.
- OLIVER JONES MARSTON, A.M.....5382 Budlong Ave.  
 Associate in Economics.
- GEORGE F. KENNGOTT, B.D., Ph.D...1016 Gramercy Place  
 Associate in Sociology.
- ROBERT J. TAYLOR, A.M.....4166 Normandie Ave.  
 Lecturer in Missions and Comparative Religion.

- MYRTLE EMILY BILES, A.M.....314 E. 32nd St.  
Assistant Professor of German.
- ARTHUR CLASON WEATHERHEAD, A.B.....  
.....1094 W. 35th St.  
Assistant Professor of Art and Design.
- EDNA AGNES COCKS, A.B.....701 W. 36th St  
Director of the Women's Gymnasium.
- WILLIAM RALPH LA PORTE, A.B...3609 McClintock Ave.  
Director of the Men's Gymnasium.
- CHESTER HERBERT BOWERS, A.M., M.D. ....  
.....1058 Richmond St.  
Medical Examiner of Men.
- ELSA HENRIETTA HORSTMANN, M.D.....  
.....317 Coulter Bldg.  
Medical Examiner of Women and Lecturer on Health  
and Development.
- RALPH GLAZE, B.S.....1904 W. 6th St.  
Director of Competitive Athletics.
- ESTER RUTH HUET.....338 W. 30th St.  
Instructor in Spanish.
- MARTIN DWELLE KNEELAND, A.B.....906 W. 34th St.  
Instructor in French.
- EVA L. de KERPEZDRON.....1025 W. 78th St.  
Instructor in French.
- ERNEST BRAUNTON.....201 S. Avenue 66  
Instructor in Architecture.
- LORENA BERNARDINE HILTY.....1133 W. 36th Place  
Instructor in Art and Design.
- AVA CLARISSA WILLS.....Santa Ana  
Instructor in Art and Design.
- ELMER HIGGINS.....836 W. 36th St.  
Instructor in Zoology.
- EUGENE MONTAGUE HUGHES, A.B.....Huntington Park  
Instructor in Chemistry.
- ELEANOR ADELAIDE GARDNER.....855 W. 34th St.  
Instructor in Greek.



- IOHANE FSAO SAKAIZAWA.....1134 Georgia St.  
Instructor in the Japanese Language.
- ARTHUR FREDERICK TORRANCE....851 W. 35th Place  
Instructor in Rhetoric, Oriental Department.
- M. PAULINE SCOTT, A.M.....2913 Flower St.  
Instructor in Composition and Literature.
- FRANCES THAYER NEILL, A.B.....1127 W. 36th St.  
Instructor in Composition and Literature.
- DOROTHY DAVIS, A.B.....2664 Budlong Ave.  
Instructor in Composition and Literature.
- EVERETT CHARLES BEACH, A.B., M.D.....  
.....918 W. 48th St.  
Lecturer on Health and Development.
- JEREMIAH B. LILLARD, A.M.....Gardena  
Lecturer in Education.
- BRUCE O. BLIVEN, A.B.....Eagle Rock Park  
Lecturer in Journalism and Advertising.
- HARRY S. SWARTH, B.S.....Exposition Park  
Lecturer in Animal Distribution.
- FRANK S. DAGGETT.....Exposition Park  
Lecturer in Animal Distribution.
- KENNETH WALLACE, A.B., M.B.A.....2068 Hobart Blvd.  
Lecturer in Business Administration.
- JOHN HEDLEY.....Redondo Beach  
Lecturer in Chinese History and Civilization.
- CHARLOTTE MAUD BROWN.....680F W. 35th St.  
Librarian.
- MATHILDE OCTAVIE WACK.....3006 S. Vermont Ave.  
Assistant Librarian.
- EDITH BERNICE LOVELAND.....680F W. 35th St.  
Assistant Librarian.
- ELMER YELTON, A.B.....Pasadena  
Secretary of the Y. M. C. A.
- MERCY ANNA WEBSTER, A.B.....466 W. 36th St.  
Secretary of the Y. W. C. A.

**Assistants in Economics and Sociology**

CLOYD HECK MARVIN, A.B.  
LOIS ANNA ELY, A.B.  
HAROLD JAMES STONIER, A.B.

**Assistant in History**

IDA ELIZABETH DAVIS, A.B.

**Laboratory Assistants in Architecture**

ROSE MICHOD  
FRANCES L. SHUMAKER

**Laboratory Assistants in Botany**

DORIS P. COOMBER  
MILDRED RUTH FINCH

**Laboratory Assistants in Chemistry**

GRACE ISABELLE ASHMORE  
RALPH TALBOTT GOODWIN  
WALTER M. LONGMOOR  
HUGH JAMES MULTER  
LELAND LESTER REBBER  
CLAUDE EARL SWIFT

**Field Assistants in Civil Engineering**

HERALD LUTHER BRIGGS  
WILLIAM AUGUSTUS JEPSON  
ELMER HARRISON JONES  
CHARLES WILLIAM SPOTTE

**Laboratory Assistants in Geology**

GERALD ALLEN CRAIG  
CORA B. FREEMAN  
FRED WARREN KELLY

**Laboratory Assistants in Zoology**

JOSEPH ROSS BECK  
ALLEN T. HOBBS  
MERVIN E. OAKES

**Laboratory Assistants in Physics**

LOREN TOMPKINS CLARK  
 DAVID BEARD MUNROE  
 HARRY E. REDDICK  
 EDWARD CHARLES SNYDER

**Assistants in Library**

OLIVER WILLIAM BELL  
 DELLA LEILA CANFIELD  
 LLOYD A. FRASHER  
 IDA LOUISE HANNING  
 BESSIE MILDRED HOAGLAND  
 LELAND WILLIAM HOLLAND  
 MAZIE JANETTE HURLBUT  
 CECILIA ROBERTSON IRVINE  
 HORACE A. JACKSON  
 MYRTLE SHULTZ  
 WESLEY VANCE SMITH  
 GRAFTON PETTIS TANQUARY  
 WILLIAM IRWIN THOMPSON  
 HELEN YETTA WALKER  
 RUTH LUCIA WATSON

**Gymnasium Assistants**

GLADYS MYRA CONE  
 ERROL PROSSER JANES  
 JOSEPH CLEMENT STOREY  
 RUTH WININGER

**Other Assistants**

GEORGIANA EMILY QUICK.....1200 W. 30th St.  
 Storekeeper, Department of Chemistry.  
 SARAH ETHYL PROCTOR .....911 W.35th St.  
 Assistant in Office of Treasurer.  
 EDNA GEORGINA BOVARD, A.B.....801 W. 34th St.  
 Assistant in Office of Registrar.  
 ANNA SHEPARD.....1373 E. 23rd St.  
 Assistant Secretary to the President.

**THE COLLEGE OF PHYSICIANS  
AND SURGEONS**

- CHARLES WILLIAM BRYSON, A.B., M.D.....  
.....808-815 Citizens Bank Bldg.  
Dean of the Department of Medicine, and Professor  
of Gynecology, and Abdominal and Clinical Surgery.
- JAMES HARVEY SEYMOUR, M.D.....502 Brockman Bldg.  
Member of the Judicial Council and Professor of  
Surgery and Clinical Surgery.
- WALTER SYDNEY JOHNSON, A.B., M.D.....  
.....303-304 W. P. Story Bldg.  
Secretary-Treasurer of the Department of Medicine  
and Professor of Obstetrics.
- ORVILLE O. WITHERBEE, M.D.....606 Auditorium Bldg.  
Professor of Surgery and Clinical Surgery.
- LYMAN BRUMBAUGH STOOKEY, A.M., Ph.D.....  
.....640 Consolidated Realty Bldg.  
Professor of Experimental Physiology.
- JAMES TUCKER FISHER, M.D...508 Hollingsworth Bldg.  
Professor of Neurology and Phychiatry.
- THOMPSON B. WRIGHT, A.M., M.D.....  
.....St. Louis Blk., Pasadena, Cal.  
Professor of Medicine.
- FRANCIS OLIVER YOST, M.D.....2831 N. Broadway  
Professor of Pediatrics.
- WILLIAM LEANDER ZUILL, M.D.....403-404 Delta Bldg.  
Professor of Otology, Laryngology, and Rhinology.
- THOMAS JEFFERSON McCOY, M.D.....636 Security Bldg.  
Professor of Ophthalmology.
- HARRY OSCAR WHITE, M.D.....516 E. Washington St.  
Professor of Anatomy, Histology, and Embryology.
- ANDREW FREMONT WAGNER, A.M., M.D.....  
.....1074 N. Los Robles Ave., Pasadena, Cal.  
Professor of Chemistry, Bacteriology, and Clinical  
Microscopy.
- CHARLES C. MANGER, Ph.G., M.D.....  
.....1106-7 Marsh-Strong Bldg  
Professor of Physiology, Pharmacodynamics, and  
Neurology.



- JOHN JOHNSON KYLE, B.S., M.D.....  
 .....702 Title Insurance Bldg.  
 Professor of Otolaryngology, and Rhinology.
- CHARLES H. WHITMAN, M.D.....County Hospital  
 Professor of Clinical Surgery.
- DALLAS CASE RAGLAND, M.D.....405-6 Delta Bldg.  
 Professor of Pathology and Hygiene.
- FITCH C. E. MATTISON, M.D.....  
 .....326 Chamber of Commerce Bldg., Pasadena, Cal.  
 Professor of Surgery.
- W. W. RICHARDSON, M.D.....611 Lissner Bldg.  
 Professor of Surgery.
- CHARLES C. BROWNING, M.D.....1004 W. P. Story Bldg  
 Professor of Diseases of the Chest.
- F. M. POTTENGER, A.M., M.D., LL.D.....  
 .....1100-1 Title Insurance Bldg.  
 Professor of Diseases of the Chest.

#### **Associate Faculty**

- GEORGE JESSE LUND, M.D.....414-417 Auditorium Bldg.  
 Associate Professor of Otolaryngology, and  
 Rhinology.
- GEORGE WASHINGTON McCOY, M.D.....  
 .....636 Security Bldg.  
 Associate Professor of Ophthalmology.
- HENRY HERBERT, M.D.....413-415 Grosse Bldg.  
 Associate Professor of Medicine.
- ANSTRUTHER DAVIDSON, C.M., M.B., M.D.....  
 .....1018 L. A. Investment Bldg  
 Associate Professor of Dermatology.
- CLARENCE HOMES CRILEY, Ph.B., M.D.....  
 .....404 Auditorium Bldg.  
 Associate Professor of Anatomy.
- EDWARD DOUGLASS JONES, M.D.....  
 .....208 Consolidated Realty Bldg.  
 Associate Professor of Therapeutics.
- HENRY E. SOUTHWORTH, M.D.....  
 .....410 Wright & Callender Bldg  
 Associate Professor of Gynecology.
- HENRY DIETRICH, M.D.....917 Brockman Bldg.  
 Associate Professor of Pediatrics.

- P. C. H. PAHL, M.D.....518 Consolidated Realty Bldg.  
Associate Professor of Orthopedic Surgery, Frac-  
tures and Dislocations.
- 
- WILLIAM ELMER CARTER, M.D.....402 Lissner Bldg.  
Assistant Professor of Medicine.
- LYLE GILLET McNIELE, M.D....626 Marsh-Strong Bldg.  
Assistant Professor of Obstetrics.
- FREDERICK A. SPEIK, S.B., M.D....800 Auditorium Bldg.  
Assistant Professor of Medicine.
- WALTER F. WESSELS, M.D.....933 Title Insurance Bldg.  
Assistant Professor of Medicine and Lecturer on Gas-  
tro-Enterology.
- HENRY W. HOWARD, M.D.....800 Auditorium Bldg.  
Assistant Professor of Gynecology.
- ERNEST BRYANT HOAG, A.M., M.D.....705 Fay Bldg.  
Assistant Professor of Pediatrics.
- WALTER LESLIE HUGGINS, Ph.B., M.D.....  
.....627 Consolidated Realty Bldg  
Assistant Professor of Surgery.
- PETER C. REMONDINO, M.D.....  
.....5th and Beech Sts., San Diego, Cal.  
Lecturer on History of Medicine and Medical Bibli-  
ography.
- H. E. MACDONALD, M.D.....314 Hollingsworth Bldg  
Lecturer on Life Insurance Examinations.
- WILLIAM DUFFIELD, B.S., M.D....423 Auditorium Bldg.  
Lecturer on Medicine.
- GEORGE L. GREER, A.B., LL.B....1012-14 Hibernian Bldg  
Lecturer on Medical Jurisprudence.
- ALBERT FULTON CHARLTON, A.B., M.D.....  
.....502 Brockman Bldg.  
Lecturer on Medicine.
- EARLE M. BROWN, B.S., M.D.....1004 W. P. Story Bldg.  
Instructor in Clinical Medicine.
- HARVEY SMITH, M.D.....1004 W. P. Story Bldg.  
Instructor in Clinical Medicine.

- LEWIS D. REMINGTON, M.D.....Monrovia, Cal.  
Instructor in Clinical Medicine.
- HARVEY J. FORBES, M.D.....  
Instructor in Clinical Medicine.  
.....Kinney-Kendall Bldg., Pasadena, Cal.  
Instructor in Clinical Medicine.
- JOHN VINCENT BARROW, S.B., M.D.....  
.....1207-8 Baker-Detwiler Bldg.  
Instructor in Materia Medica.
- CHARLES F. NELSON, S.B., M.D.....  
.....732 L. A. Investment Bldg.  
Instructor in Materia Medica.
- FRANK JAMES LEAVITT, M.D.....159 S. Western Ave.  
Instructor in Medicine.
- EDWARD RUSSELL HANLON, Ph.G., M.D.....  
.....1156 Central Ave.  
Instructor in Medicine.
- ANDERS PETERSON, M.D.....County Hospital  
Instructor in Genito-Urinary Diseases.
- RICHARD C. MacCLOSKEY, B.S., M.D.....  
.....2210 W. Jefferson St.  
Instructor in Materia Medica.
- ANDREW P. WILSON, M.D.....900 L. A. Investment Bldg.  
Instructor in Surgery.
- A. J. SCOTT, JR., M.D.....1015 Story Bldg.  
Instructor in Pediatrics.
- A. F. MAISCH, M.D.....606 Auditorium Bldg.  
Instructor in Medicine.
- W. H. KIGER, M.D.....Consolidated Realty Bldg.  
Instructor in Proctology.
- FRED E. LETTICE, M.D.....1018 Brockman Bldg.  
Instructor in Surgery.
- CHARLES EATON PHILLIPS, A.B., M.D.....  
.....815 Wright & Callender Bldg.  
Instructor in Surgery.
- HARLAN SHOEMAKER, A.B., M.D.....  
.....620-22 Marsh-Strong Bldg.  
Instructor in Surgery.

- EDWARD SWIFT, M.D.....1236 Merchants Nat'l Bank Bldg.  
Instructor in Surgery.
- R. S. CUMMINGS, M.D.....1002 Brockman Bldg.  
Instructor in Medicine.
- WILBUR W. MACKENZIE, M.D...L. A. Investment Bldg.  
Instructor in Physical Diagnosis.
- H. W. EDWARDS, B.S., M.D.....323 Marsh-Strong Bldg.  
Instructor in Surgery.
- MILES GUTHRIE VARIAN, M.D.....  
.....620-22 Marsh-Strong Bldg  
Instructor in and Demonstrator of Anatomy.
- WILLIAM B. KERN, M.D.....604 Exchange Bldg.  
Instructor in Psychiatry.
- ROBERT M. DUNSMOOR, M.D.....1105 Garland Bldg.  
Instructor in Materia Medica.
- WM. ETHELBERT HALL, M.D....3853 Normandie Ave.  
Instructor in Therapeutics.
- ELMER R. PASCOE, M.D...410-16 Wright & Callender Bldg.  
Instructor in Gynecology.
- CHESTER HERBERT BOWERS, A.M., M.D.....  
.....3122½ S. Vermont Ave.  
Instructor in Physiology.
- J. S. LANCASTER, M.D.....1835 Oxford Ave.  
Instructor in Medicine.
- ARTHUR STANLEY GRANGER, A.B., M.D.....  
.....705-10 Brockman Bldg.  
Instructor in Medicine.
- DWIGHT S. MOORE, M.D.....1106-7 Marsh-Strong Bldg.  
Instructor in Medicine.
- ROSS ALLEN HARRIS, M.D.....  
.....300-301 Broadway Central Bldg.  
Instructor in Ophthalmology.
- M. J. ROBERTS, M.D.....1229 W. 23rd St.  
Instructor in Medicine.
- J. EUGENE FAHY, A.B., M.D.....1151 E. 20th St.  
Instructor in Medicine.



- LEON SHULMAN, M.D.....845 S. Hill St.  
Instructor in Medicine.
- HERMAN SUGARMAN, M.D.....Auditorium Bldg.  
Instructor in Medicine.
- OTTO BAMES, M.D.....4328 S. Central Ave.  
Instructor in Chemistry.

### THE COLLEGE OF LAW

- FRANK M. PORTER, A.B., LL.M., Dean.....Tajo Bldg.  
Evidence, Bailments and Carriers, Personal Property  
and Sales.
- GAVIN W. CRAIG, LL.M. (Judge of the Superior  
Court) .....Hall of Justice  
Elementary Law, Water Rights, and Irrigation Law,  
Securities.
- T. W. ROBINSON, A.M.....County Law Library  
Statutory Interpretation.
- LEWIS A. GROFF.....717 Trust & Savings Bldg.  
Mining Law and History of Jurisprudence.
- CLAIR S. TAPPAAN, LL.B.....815 Black Bldg.  
Contracts (Embracing Quasi Contracts, Partnership,  
Agency, Guaranty, and Suretyship), Bills and Notes.  
Notes.
- W. T. CRAIG, Ph.D.....731 Higgins Bldg.  
Bankruptcy.
- JAMES G. SCARBOROUGH, A.B.....1225 Washington Bldg.  
Code Pleading.
- E. W. TUTTLE, LL.B.....921 Higgins Bldg.  
Admiralty and Conflict of Laws.
- SEWARD A. SIMONS, A.B.....812-814 Security Bldg.  
Insurance Law.
- WALTER F. HAAS, ESQ.....302 Coulter Bldg.  
Public Officers.

- BEULAH WRIGHT .....344 St. Andrews Place  
Public Speaking and Debating.
- KEMPER B. CAMPBELL, LL.M.....810 California Bldg.  
Torts, Damages, Junior Real Property.
- PERCY V. HAMMON, LL.B.....District Attorney's Office  
Criminal Law and Criminal Procedure.
- WARREN E. LLOYD, M.L., Ph.D.....906 Central Bldg.  
Philosophy of the Law, Spanish and Mexican Land  
and Mining Law.
- E. W. CAMP, A.B., LL.B.....Santa Fe Railway Office  
Interstate Commerce.
- WILLIAM W. PHELPS.....604 Merchants Trust Bldg.  
Codification.
- GERTRUDE COMSTOCK, Ph.B.....College of Oratory  
Debating.
- VINCENT MORGAN, LL.B.....502 Exchange Bldg.  
Code Pleading, Domestic Relations, Senior Real  
Property.
- CHAS. C. MONTGOMERY, A.B., LL.B.....908 Security Bldg.  
Equity Jurisprudence and Procedure, Federal Juris-  
diction and Procedure.
- CURTIS D. WILBUR (Judge of the Superior Court)....  
..... Court House  
Extraordinary Legal Remedies.
- FREDERICK W. HOUSER (Judge of the Superior  
Court) ..... Court House  
Private Corporations.
- CARLOS S. HARDY, D.C.L.....230-232 Exchange Bldg.  
Fraternal Insurance, Medical Jurisprudence.
- ARTHUR P. WILL, LL.M.....Title Insurance Bldg.  
American Diplomacy, Trust and Monopolies.
- MATTISON B. JONES, A.B.....823 H. W. Hellman Bldg.  
Advocacy.
- BYRON C. HANNA, LL.B.....212 Exchange Bldg.  
Public Corporation, California Codes.
- JAMES A. GIBSON (Ex-Supreme Court Commissioner  
and Superior Judge).....P. E. Bldg.  
Appeals.

- PAUL J. McCORMICK (Judge of the Superior Court)  
 ..... Court House  
 Criminal Law, Criminal Procedure.
- O. R. W. ROBINSON, LL.B. (Receiver, U. S. Land  
 Office) ..... U. S. Land Office  
 Acquisition of Title to Public Lands.
- THOS. A. BERKEBILE, LL.M. .... 512 Higgins Bldg.  
 Civil Law, Logic, Comparative Constitutional Law.
- W. S. ALLEN, A.B., B.D. .... Title Insurance & Trust Co.  
 Conveyancing.
- VICTOR R. McLUCAS, A.B., LL.B. .... Security Bldg.  
 Common Law Pleading, Wills.
- WILLIAM HAZLETT, LL.B. .... 605 Trust & Savings Bldg.  
 International Law.
- WM. BEHR ..... 605 Trust & Savings Bldg.  
 Use of Books and Research.
- F. L. A. GRAHAM, LL.B. .... California Bldg.  
 Patents and Unfair Competition.
- TANNA ALEX, LL.M. .... California Bldg.  
 Criminal Law, History of Criminal Law.
- LITTA BELLE HIBBEN, LL.B. .... California Bldg.  
 Domestic Relations.
- JAMES S. McKNIGHT, LL.B. .... 402 H. W. Hellman Bldg.  
 Constitutional Law.
- HUGH NEAL WELLS, LL.B. ....  
 Debating, Public Speaking and Parliamentary Law.
- BENJAMIN FRANKLIN BLEDSOE, A.B. (Judge of  
 the U. S. District Court) ..... Federal Bldg  
 Legal Ethics.

### Judges of the Practice Court

- Department 1—Kemper B. Campbell, LL.M., Presiding  
 Judge.
- Department 2—Elmer R. McDowell, LL.M.
- Department 3—Walter Bowers, LL.M.
- Department 4—James S. McKnight, LL.B.
- Department 5—A. A. Kidder, Jr., LL.B.

Department 6—A. L. Bartlett, LL.B.  
Department 7—R. W. Heffelfinger, LL.B.  
Department 8—Ewald Selph, LL.B.  
Department 9—O. R. W. Robinson, LL.B.  
Department 10—C. L. Bagley, LL.B.  
Department 11—Clair Enyeart, LL.M.  
Department 12—Ralph A. Chase, LL.B.  
Department 13—John B. Haas, LL.B.

### **Extra Session Judges**

Frank P. Doherty, LL.B.  
J. Karl Lobdell, LL.B.  
Richard J. O. Culver, LL.B.  
James D. Taggart, A.B., LL.B.  
Thomas P. White, LL.B.

### **Appeals**

Gavin W. Craig (Judge of Superior Court, Los Angeles County).  
Frederick W. Houser (Judge of Superior Court, Los Angeles County).

## **THE COLLEGE OF DENTISTRY**

LEWIS E. FORD, D.D.S., Dean.....L. A. Investment Bldg.  
Professor of Clinical Dentistry.  
EDGAR PALMER, D.D.S.....922 S. Bonnie Brae St.  
Emeritus Dean.  
HENRY G. BRAINERD, A.B., M.D.....Exchange Bldg.  
Emeritus Professor of Medicine.  
CHARLES D. LOCKWOOD, A.B., M.D.....Pasadena, Cal.  
Professor of Oral Surgery, Chief of the Oral Surgical Clinic.  
E. L. LEONARD, B.S., M.D.....Marsh-Strong Bldg.  
Professor of Histology, Bacteriology and General Pathology.



- B. F. ESHELMAN, D.D.S.....Story Bldg.  
Professor of Ceramic Art.
- A. HALDEN JONES, A.B., M.D.....Bradbury Bldg.  
Professor of Physics, Chemistry and Metallurgy.
- GARRETT NEWKIRK, M.D.....Pasadena, Cal.  
Professor of Dental Hygiene and Dental Ethics.
- JAMES D. McCOY, D.D.S.....Brockman Bldg.  
Secretary of the Faculty and Professor of Orthodontia  
and Radiography.
- GEORGE H. WALKER, D.D.S.....Brockman Bldg.  
Professor of General and Dental Materia Medica.
- C. J. R. ENGSTROM, D.D.S.....Brockman Bldg.  
Professor of Prosthesis and Crown and Bridge Work.
- A. C. LA TOUCHE, D.D.S.....College Bldg.  
Professor of Operative Dentistry and Superintendent  
of the College.
- W. R. MOLONEY, M.D.....Mason Bldg.  
Professor of Anatomy and Chief of the Laboratory  
of Anatomy.
- J. W. REEVES, A.B., M.D.....Marsh-Strong Bldg  
Professor of General Physiology.
- JULIO ENDELMAN, D.D.S.....Dental College Bldg.  
Professor of Special Pathology and College Librarian.
- MELVIN ELLIS, Ph.D., M.D.....Auditorium Bldg.  
Associate Professor of Anatomy.
- JOHN C. HOPKINS, D.D.S.....College Bldg.  
Senior Demonstrator of Operative Dentistry and  
Superintendent of the Operatory.
- E. LESLIE EAMES, D.D.S.....College Bldg.  
Senior Demonstrator of Prosthesis and Crown and  
Bridge Work.
- JOHN R. McCOY, D.D.S.....Brockman Bldg.  
Demonstrator of Orthodontia.

- MAXWELL M. DIXON, D.D.S.....Story Bldg.  
Demonstrator of Oral Prophylaxis and Pyorrhea  
Alveolaris.
- H. C. KING, D.D.S.....Consolidated Realty Bldg.  
Demonstrator of Porcelain Work.
- F. G. STALEY, D.D.S.....College Bldg.  
Demonstrator of Prosthesis
- H. E. CANNON, D.D.S.....College Bldg.  
Demonstrator of Operative Dentistry.
- EDWIN H. SCHNEIDER, M.D.....Investment Bldg.  
Demonstrator of Anatomy.
- WAYNE P. HANSON, M.D.....Broadway Central Bldg.  
Demonstrator of Anatomy.
- MARK KELSEY, D.D.S.....Auditorium Bldg.  
Demonstrator of Dental Ceramics.
- T. L. MILLHAM, D.D.S.....557 N. Western Ave.  
Demonstrator of Operative Dentistry.
- J. T. PARKER, D.D.S.....Pasadena, Cal.  
Demonstrator of Operative Technics.
- INGLE CARPENTER, Ph.B., LL.B.....California Bldg.  
Lecturer on Dental Jurisprudence.
- DAVID D. THORNTON, M.D.....Wright & Callender Bldg.  
Lecturer on Oral Surgery.
- W. J. BELL, D.D.S.....1046 W. 35th Place  
Demonstrator and Lecturer in Electricity.
- ROY L. SPENCER, D.D.S.....Merchants National Bank Bldg.  
Lecturer on Extractions and Anesthesia, Senior Dem-  
onstrator of Extractions.
- I. D. NOKES, D.D.S.....Marsh-Strong Bldg.  
Lecturer on Comparative Anatomy and Odontography,  
Curator of the College Museum.
- JOHN MacKENZIE BROWN, M.D.....Brockman Bldg.  
Lecturer in Rhinology and Laryngology.
- R. S. CUMMINGS, M.D.....Brockman Bldg.  
Lecturer on Internal Medicine.

- FRANK L. PLATT, D.D.S.....  
 .....Elkan Gunst Bldg., San Francisco, Cal.  
 Lecturer and Clinical Instructor in Local Anaesthesia.
- RICHMOND C. LANE, D.D.S.....Story Bldg.  
 Assistant in Oral Surgery.
- H. PAGE BAILEY, D.D.S.....Auditorium Bldg.  
 Assistant in Dental Pathology.
- LOUIS FELSENTHAL, D.D.S.....I. N. Van Nuys Bldg.  
 Assistant in Oral Surgery.
- P. P. SEWELL, D.D.S.....6th and Alvarado St.  
 Assistant in Oral Surgery.
- E. F. THOLEN, M.D., D.D.S.....College Bldg.  
 Assistant in Oral Surgery.
- DR. C. J. APABLASA, D.D.S.....Hollingsworth Bldg.  
 Clinical Instructor in Extractions.
- FRANK B. DAMRON, D.D.S.....Long Beach, Cal.  
 Clinical Instructor in Operative Dentistry.
- JOE HAMILTON, M.D.....  
 Assistant in Physiology.
- E. EARL MOODY, A.B.....  
 Assistant in Physiology.

### THE MACLAY COLLEGE OF THEOLOGY

- EZRA A. HEALY, A.M., S.T.D., Dean.....841 W. 35th Place  
 Professor of Systematic Theology, and Exegesis.
- JAMES ALLEN GEISSINGER, A.B., D.D...1017 W. 34th St.  
 Professor of Homiletics, and Pastoral Theology.
- JAMES BLACKLEDGE, A.M.....1043 W. 34th St.  
 Professor of Hebrew Language and Literature.
- JOHN G. HILL, A.M., S.T.B., Ph.D.....854 W. 35th Place  
 Professor of Hermeneutics, and Religious Pedagogy.
- JAMES MAIN DIXON, A.M., L.H.D., F.R.S.E.....  
 .....427 N. Ardmore Ave.  
 Professor of Oriental Missions, the Early Saxon  
 Gospels.

- ELEANOR A. GARDNER.....855 W. 34th St.  
Professor of New Testament Greek.
- EMORY S. BOGARDUS, A.M., Ph.D.....1205 W. 37th St.  
Professor of Sociology.
- GEORGE W. COULTAS, A.B., S.T.B.....Whittier  
Professor of Historical Theology.
- ROBERT J. TAYLOR, A.M.....4166 Normandie Ave.  
Professor of Missions, their History and Present  
Status.

### THE COLLEGE OF PHARMACY

- LAIRD J. STABLER, M.S., Ph.C.....1120 W. 30th St.  
Dean and Professor of Chemistry and Toxicology.
- ALBERT B. ULREY, A.M.....1435 W. 23rd St.  
Professor of Physiology and Hygiene.
- ARTHUR R. MAAS, Ph.C.....1121 W. 51st Place  
Professor of Pharmacy.
- ANDREW C. LIFE, A.M.....1370 W. 36th Place  
Assistant Professor of Botany and Pharmacognosy.
- JOHN H. BLUMENBERG, Ph.B., Ph.G.....2230 W. 30th St.  
Instructor in Pharmacy.
- CHARLES W. HILL, Ph.G.....906 E. 3rd St.  
Lecturer on Materia Medica.
- HOWARD A. PEAIRS, A.B.....319 N. Los Angeles St.  
Lecturer on Pharmacal Jurisprudence.
- ERWIN H. MILLER, B.S.....1051 W. 35th St.  
Lecturer on Food and Drug Adulteration.
- L. SCHIFF .....1337 S. Hope St.  
Lecturer on Commercial Pharmacy.
- REX DUNCAN, M.D.....638 Van Nuys Bldg.  
Lecturer on First Aid to the Injured.

**THE COLLEGE OF MUSIC**

WALTER FISHER SKEELE, A.B., Dean.....136 E. Avenue 55  
Professor of Piano and Pipe Organ.

CHARLES E. PEMBERTON.....678 S. Burlington Ave.  
Professor of Violin, Harmony, Counterpoint, His-  
tory and Musical Theory.

ARTHUR M. PERRY.....1749 W. 25th St.  
Instructor in Violin.

MRS. NORMA ROCKHOLD ROBBINS.....  
.....911 Lomita Ave., Glendale, Cal.  
Instructor in Voice Culture.

HORATIO COGSWELL .....1244 Van Ness Ave.  
Instructor in Voice Culture.

LILLIAN J. BACKSTRAND.....1017 W. 36th St.  
Instructor in Voice Culture.

MRS. HENRY G. SANGER.....1381 E. 23rd St.  
Instructor in Voice Culture.

C. ADELAIDE TROWBRIDGE .....Fowler Apts.  
Instructor in Piano.

MADGE PATTON .....1210 Valencia St.  
Instructor in Piano.

M. ESTHER DAVIDSON.....218 S. Avenue 66  
Instructor in Piano.

WILLIAM H. MEAD.....Blanchard Bldg.  
Instructor in Flute.

C. S. DELANO.....2610 W. 8th St.  
Instructor in Guitar and Mandolin.

J. J. KOZLOWSKI.....Blanchard Bldg.  
Instructor in Clarinet.

PEARL ALICE MACLOSKEY.....1017 W. 36th St.  
Secretary to the Dean.



**THE COLLEGE OF ORATORY**

- BEULAH WRIGHT, Dean.....344 St. Andrews Place  
Professor of Oratory and the Speaking Voice.
- GERTRUDE COMSTOCK, Ph.B.....685 S. Witmer St.  
Associate Professor of Interpretation and Forensics.
- ELIZABETH YODER .....1313 W. 8th St.  
Associate Professor of Dramatic Art.
- LEONARD G. NATTKEMPER, A.B...1253 W. 37th Drive  
Associate Professor of Public Speaking and Expression.
- BENJAMIN F. STELTER.....3025 S. Vermont Ave.  
Professor of the English Language and Literature.
- PAUL SPENCER WOOD, A.B.....1159 W. 37th Drive  
Professor of the English Language and Literature.
- ROY D. MALCOM, A.M., Ph.D.....457 N. Serrano Ave.  
Professor of History.
- ALBERT B. ULREY, A.M.....1435 W. 23rd St.  
Professor of Physiology and Hygiene.
- EDNA COCKS, A.B.....701 W. 36th St.  
Director of the Women's Gymnasium.

**THE COLLEGE OF FINE ARTS**

- WILLIAM LEES JUDSON.....216 Thorne St.  
Dean.
- AVA CLARISSA WELLS.....Santa Ana  
Drawing and Painting.
- FRANK GEORGE TAPNER.....1132 S. Mott St.  
Metal and Jewelry.
- KARL YENS .....Arroyo Verde  
Painting.
- BERNARDINE HILTY.....1133 W. 36th Place  
Design.

**Assistants**

HAZEL SHACKELFORD .....406 W. 3rd St.  
Sacred History.

OSCAR RUDOLPH HAMMERAAS....6414 Eagle Rock Ave.  
Still Life.

PAUL GUSTAV SPRUNCK.....232 Thorne St  
Anatomy.

ISABELLE PATTERSON .....603 W. Avenue 54  
Mythology.

# *The* COLLEGE of LIBERAL ARTS

## ORGANIZATION

The College of Liberal Arts is organized into Undergraduate Departments and a Graduate Department.

Of the Undergraduate Departments the Departments of Architecture, Biology, Chemistry, Economics and Sociology, Education, the English Language and Literature, French, German, History, Latin, Mathematics, Philosophy, Physics, and Spanish offer four-year major courses leading to the degree of Bachelor of Arts. The Departments of Civil Engineering and Electrical Engineering offer four-year major courses leading to the degree of Bachelor of Science. The Departments of Mining Engineering, Chemical Engineering, Agriculture, and Journalism and Advertising at present offer only the first two years of a four-year major course leading to the degree of Bachelor of Science. The Departments of Art and Design, Drawing, the English Bible, Greek, Italian, Music, Oratory, Oriental Studies, Physical Education, and Political Science, offer courses that are either required or elective studies in the major courses offered in the Departments previously named.

The Graduate Department offers courses leading to the degree of Master of Arts in Biology, Chemistry, Economics and Sociology, Education, English, French, German, Greek, History, Latin, Mathematics, Philosophy, and Physics. It also offers courses leading to the University Recommendation for the High School Teacher's Certificate in Biology, Chemistry, Economics and Sociology, Education, English, French, German, History, Latin, Mathematics, Physics, and Spanish.

## THE UNDERGRADUATE COURSES

### CONDITIONS OF ADMISSION

There are three classes of admissions to the undergraduate courses: (a) admission to Freshman standing; (b) admission to advanced standing; and (c) admission as special student.

a. **Candidates for admission to Freshman standing** must be at least sixteen years of age and must present evidence of good moral character. They must also give, either by certificate or by examination as hereafter described, evidence of preparation in fifteen units of preparatory subjects selected from the general list of subjects described on the following pages. For admission to the course leading to the degree of Bachelor of Arts these fifteen units must be made up as follows:

English .....	2 units*
A Foreign Language .....	2
Laboratory Science .....	1
Algebra and Plane Geometry.....	2
United States History and Civics.....	1
Electives .....	7

The laboratory science may be Botany, Zoology, Physiology, Physics, or Chemistry.

The electives are determined entirely by the requirements for admission to the particular college course that the student desires to pursue.

For admission to the courses in Engineering the fifteen units must include the following:

English .....	2 units
A Modern Language .....	2
Chemistry .....	1
Physics .....	1
Elementary Algebra .....	1
Advanced Algebra .....	1
Plane Geometry .....	1

---

\*The term "unit" is here used to denote a preparatory subject studied through one school year with five class exercises (or the equivalent) per week.

Trigonometry and Solid Geometry.....	1
United States History and Civics.....	1
Freehand Drawing .....	1
Mechanical Drawing .....	1
Electives .....	2

## COMPLETE LIST OF ADMISSION SUBJECTS

Eng. Grammar and Comp..... $\frac{1}{2}$	Civics .....	$\frac{1}{2}$
Eng. Lit., Elementary .....	Social Science .....	$\frac{1}{2}$ , 1
Eng. Lit., Advanced .....	Algebra, Elementary .....	1
Eng. Lit., History of .....	Algebra, Advanced .....	1
Latin, Elementary .....	Plane Geometry .....	1
Latin, Advanced .....	Plane Trigonometry .....	$\frac{1}{2}$
Greek, Elementary .....	Solid Geometry .....	$\frac{1}{2}$
Greek, Advanced .....	Botany .....	1
German, Elementary .....	Zoology .....	1
German, Advanced .....	Chemistry .....	1
French, Elementary .....	Physics .....	1
French, Advanced .....	Physiology .....	1
Spanish, Elementary .....	Physical Geography .....	1
Spanish, Advanced .....	General Science .....	1
History, Grecian and Roman.....	Freehand Drawing .....	$\frac{1}{2}$ , 1
History, Mediaeval and Modern..	Mechanical Drawing .....	$\frac{1}{2}$ , 1
History, English .....	Vocational Subjects .....	1, 2, 3
History, United States .....		

b. Candidates for admission with Advanced Standing are of two types:

1. Students from other institutions of recognized collegiate rank may be admitted to such standing and upon such terms as the Faculty may deem equitable. Every such candidate is required to present a catalogue of the institution in which he has studied; a full statement, duly certified, of the subjects he has there completed and of the subjects there presented for entrance; and a letter of honorable dismissal. The Faculty reserves the right to determine, after a test of at least one semester, the amount of credit that the applicant may receive.

2. Graduates of State Normal Schools who are also graduates of accredited high schools, may receive tentative advanced credit amounting to from 30 to 45 units.



c. **Candidates for admission as Special Students** must be persons of mature age who desire to take up special work in one department, or in one subject with its related branches. Such special students are not candidates for a degree; but they may become candidates by satisfying the entrance requirements for a regular course. Such students come under the same regulations as regular undergraduates, and forfeit their privileges by failure to maintain a good standing.

## **METHODS OF ADMISSION TO THE FRESHMAN CLASS**

**Admission by Certificate.** The candidate, having completed a regular course in the University High School of this University or in an accredited high school, is admitted to the Freshman class without examination, on presenting a certificate signed by the principal. Unconditional credit is given only for entrance subjects in which the candidate is specifically recommended. Conditional admission may be granted where a deficiency is not in excess of 20 semester-hours (2 units) of preparatory work; but all such conditions must be removed by the end of the Freshman year.

The Faculty reserves the right, however, to require an examination upon any or all of the studies set for entrance, whenever there is doubt that the preparation has been sufficient. To increase the probability of entrance without examination, credentials should be presented as early as possible before registration. Blanks of application for admission may be obtained by applying to the Registrar.

b. **Admission by Examination.** The regular examinations for admission are held in September, when candidates are examined in all the required admission subjects not covered by certificate from an accredited school.

---

\*Candidates may be conditionally admitted to the freshman class, if they are not deficient in more than twenty semester hours (two units) of preparatory work, but each case is referred to a faculty committee and only by vote of such committee can such admission be gained. All such conditions must be removed by the end of the Freshman year.

## DESCRIPTION OF ADMISSION SUBJECTS

1. **English Grammar and Composition.** It is expected that the candidate for admission will have acquired during his high school course a command of correct and clear English, spoken and written. As the result of classroom study of grammar and rhetoric, in addition to much practice in actual writing, he must be prepared to answer specific questions upon the practical essentials of those subjects, such as the relations of the various parts of the sentence to each other, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors. He must be able to write an essay developing a theme through several paragraphs, free from marked deficiencies in spelling, punctuation, sentence-structure, and paragraphing, and indicative of ability to think consecutively on a simple subject. A preliminary examination is given to all students before enrolling them permanently in the required course in Freshman English composition, and each student found deficient in such preparation is required to register in the Sub-Freshman English courses 1a or 1b or both, for which no credit is given. In cases of marked deficiency the enrollment of the student in the class in Freshman English is cancelled. No grade is given in Freshman English under any circumstances until all deficiencies are made up. (1½ units.)

2. **English Literature.** The standard maintained is that of the National College Entrance Examination Board. The division of units is as indicated below.

(a) **ELEMENTARY ENGLISH LITERATURE.**—Such a reading of the following works (or their equivalents), grouped as indicated, as shall give the student the habit of intelligently reading a book as an artistic unit. **At least two selections are to be made from each of the following five groups**, except as otherwise provided under Group 1. Each selection must include all the work or works included between two dashes. (1 unit.)

Group 1. Classics in translation. The "Old Testament," comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the Books of Ruth and Esther.—The "Odyssey" (with the omission, if desired of Books i, ii, iii, iv, v, xv, xvi, and xvii).—The "Iliad" (with the omission, if desired, of Books xi, xiii, xiv, xv, xvii, and xxi).—The "Aeneid." (For any selection from this group a selection from any other group may be substituted.)

Group 2. Shakespeare. "A Midsummer-Night's Dream."—"The Merchant of Venice."—"As You Like It."—"Twelfth Night."—"The Tempest."—"Romeo and Juliet."—"King John"—"Richard II."—"Richard III."—"Henry IV."—"Coriolanus".—"Julius Caesar".—"Macbeth".—"Hamlet." (The last three if not chosen for study under (b.)

Group 3. Prose Fiction. Malory's "Morte d'Arthur" (about 100 pages).—Bunyan's "Pilgrim's Progress".—Swift's "Gulliver's Travels" (the voyages to Lilliput and to Brobdingnag).—Defoe's "Robinson Crusoe," Part I.—Goldsmith's "Vicar of Wakefield".—Frances Burney's "Evelina".—Any of Scott's novels.—Any of Jane Austen's novels.—Miss Edgeworth's "Castle Rackrent" or "The Absentee".—Any of Dicken's novels.—Any of Thackeray's novels.—Any of George Eliot's novels.—Mrs. Gaskell's "Cranford."—Kingsley's "Westward Ho!" or "Hereward, the Wake".—Reade's "The Cloister and the Hearth".—Blackmore's "Lorna Doone".—Hughes' "Tom Brown's Schooldays".—Stevenson's "Treasure Island" or "Kidnapped" or "The Master of Ballantrae".—Any of Cooper's novels.—Selected tales from Poe.—Hawthorne's "The House of the Seven Gables" or "Twice Told Tales" or "Mosses from an Old Manse".—A collection of short stories from various standard authors.

Group 4. Essays, Biography, etc. Addison and Steele's "Sir Roger de Coverly Papers" or selections from the "Tatler" and "Spectator" (about 200 pages).—Selections from Boswell's "Life of Johnson" (about 200 pages).—Franklin's "Autobiography".—Irving's "Sketch Book" (about 200 pages)

or "The Life of Goldsmith".—Southey's "Life of Nelson".—Lamb's "Essays of Elia" (about 100 pages).—Lockhart's "Life of Scott" (about 200 pages).—Thackeray's "English Humorists" (lectures on Swift, Addison, and Steele).—Macaulay's "Essays" (any one of those on Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederick the Great, or Madame d'Arbly).—Trevelyan's "Life of Macaulay" (about 200 pages).—Ruskin's "Sesame and Lilies" or "Selections" (150 pages).—Dana's "Two Years Before the Mast".—Selections from Lincoln (two Inaugurals, Speeches in Independence Hall and at Gettysburg, the Last Public Address, the letter to Horace Greeley, and a brief memoir or estimate of Lincoln).—Parkman's "The Oregon Trail".—Thoreau's "Walden".—Selected essays from Lowell (about 150 pages).—Holmes' "Autocrat of the Breakfast Table"—Stevenson's "An Inland Voyage" and "Travels with a Donkey"—Huxley's "Autobiography" and selections from "Lay Sermons" (including "Improving Natural Knowledge," "A Liberal Education," and "A Piece of Chalk").—A collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, and later writers.—A collection of letters by various standard writers.

Group 5. Poetry. Palgrave's "Golden Treasury (First Series)", Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns.—Palgrave's "Golden Treasury (First Series)", Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under (b)).—Goldsmith's "The Traveller" and "The Deserted Village".—Pope's "The Rape of the Lock".—A collection of English and Scottish ballads (as the Robin Hood ballads, "The Battle of Otterburn", "King Estmere", "Young Beichan", "Bewick and Grahame", "Sir Patrick Spens", etc.)—Coleridge's "The Ancient Mariner", "Christabel", and "Kubla Khan".—Byron's "Childe Harold", canto III or IV, and "The Prisoner of Chillon"—Scott's "The Lady of the Lake" or "Marmion".—Macaulay's "Lays of Ancient Rome", "The Battle of Naseby", "The Armada", and "Ivry".—Tennyson's "The Princess" or "Gareth and Lynette", "Lancelot and Elaine", and "The Passing of Arthur".—Browning's "Cava-



lier Tunes", "The Lost Leader", "How They Brought the Good News from Ghent to Aix", "Home Thoughts from Abroad", "Home Thoughts from the Sea", "An Incident of the French Camp", "Herve Riel", "Pheidippides", "My Last Duchess", "Up at a Villa—Down in the City", "The Italian in England", "The Patriot", "The Pied Piper", "De Gustibus"—and "Instans Tyrannus".—Arnold's "Sohrab and Rustum", and "The Forsaken Merman".—Selections from "American Poetry", with special attention to Poe, Lowell, Longfellow, and Whittier.

(b) **ADVANCED ENGLISH LITERATURE.**—Such a study of the following works, grouped as indicated, as shall enable the student to answer questions upon their content, form and structure; upon the meanings of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style; and upon their relations to their author's life, other works, and literary environment. **One selection is to be made from each of the following groups.** (1 unit.)

Group 1. Drama. Shakespeare's "Julius Caesar".—"Macbeth".—"Hamlet."

Group 2. Poetry. Milton's "L'Allegro", "Il Penseroso", and either "Comus" or "Lycidas".—Tennyson's "The Coming of Arthur", "The Holy Grail", and "The Passing of Arthur".—The selections from Wordsworth, Keats and Shelley, in Book IV of Palgrave's "Golden Treasury (First Series)".

Group 3. Oratory. Burke's "Speech on Conciliation with America".—Macaulay's "Speech on Copyright" and Lincoln's "Speech at Cooper Union".—Washington's "Farewell Address" and Webster's "First Bunker Hill Oration."

Group 4. Essays. Carlyle's "Essay on Burns" (with a selection from Burns' "Poems").—Macaulay's "Life of Johnson".—Emerson's "Essay on Manners."

(c) **HISTORY OF ENGLISH LITERATURE.**—A brief outline of the history of English literature, emphasizing the salient characteristics of the successive literary periods from the "Beowulf" to the present day, and associating with each its chief books and authors. ( $\frac{1}{2}$  unit.)



3. **Elementary Latin.** For the requirements in Elementary Latin there are necessary an accurate pronunciation, a thorough knowledge of regular forms and of the principles of syntax, a vocabulary of about fifteen hundred words, and the ability to translate easy prose at sight and to write simple sentences. These attainments can be secured from the careful study of an elementary text-book and four books of Caesar, together with oral and written composition and occasional practice in sight translation. The examination in composition in 1915-1916 will be based on the second book of Caesar's "Gallic War." (2 units.)

4. **Advanced Latin.** For the requirements in Advanced Latin there are necessary the ability to translate at sight portions of Cicero's orations and Vergil's "Aeneid", familiarity with the principles of the Latin hexameter, and the ability to translate a passage of connected English based on Cicero. These attainments can be secured from the careful study of six of Cicero's orations and six books of Vergil's "Aeneid," together with very thorough drill in oral and written composition. It is expected that a certified composition book will be presented for entrance credit. The examination in composition in 1915-1916 will be based on the oration "Pro Archia." (2 units; without the composition, 1 unit.)

5. **Greek.** First year's work: The exercises in any of the beginning books and one book of the "Anabasis" or its equivalent. Second year's work: Three additional books of the "Anabasis" or an equivalent. Book I-III of the "Iliad" or an equivalent. Composition equal to one exercise a week for one year. (First and second years, together, 2 units.)

6. **Advanced Greek.** Third year's work: Three additional books of the "Iliad," three of the "Odyssey," and either Plato's "Apology" and "Crito," or Herodotos, books VI-VII-VIII, or the equivalent from some other author. (1 unit.)

7. **German.** A knowledge of the inflections of the articles, nouns, adjectives, pronouns, weak verbs, and the usual strong verbs; familiarity with the use of the modal auxiliaries and

the common prepositions, with the simpler uses of the subjunctive, and with the principles governing order of words; and the ability to read and translate such stories and plays as Storm's "Immensee" and Benedix's "Der Prozess," to translate easy English into German, to translate at hearing, and to pronounce correctly. (2 units.)

8. **Advanced German.** Greater fluency in reading and translating German; the ability to re-tell an episode or short story and to explain words and phrases in German; familiarity with the uses of the subjunctive mode, especially in indirect discourse, and with the formations of the passive voice, and a general strengthening of the knowledge of grammatical forms. This knowledge may be attained by reading and translating from 500 to 600 pages of German, with much viva voce practice in the form of questions on the text and explanations in German. Two lessons a week should be devoted to prose composition and oral practice in grammar and vocabulary. (2 units.)

9. **French.** A knowledge of the essentials of grammar, including the inflections of nouns, adjectives, pronouns, and regular and common irregular verbs; familiarity with the use of the personal pronouns and with the elementary rules of syntax; and the ability to pronounce accurately, to read smoothly, to translate modern stories and plays, such as About's "Le Roi des Montagnes" and Labiche and Martin's "Le Voyage de M. Perrichon"; to translate at hearing and at sight; and to translate easy English into French. (2 units.)

10. **Advanced French.** A thorough knowledge of grammar. The reading from nineteenth century authors of 500 to 700 pages beyond the work of the first two years. Advanced composition with particular reference to idiom. The ability to understand and to express oneself in ordinary French. (2 units.)

11. **Spanish.** The essentials of Spanish Grammar. Readings from such a text as Hill's "Spanish Tales for Beginners," and one or more novels. Simple conversation in

Spanish. Special importance is attached to a knowledge of Spanish verbs. (2 units.)

12. **Advanced Spanish.** Two years of work, including the careful reading of short stories and such novels as "Marianela," "El Capitán Veneno," "Gil Blas," and "Pepita Jiménez." Crawford's "Composition" and Ramsey's "Grammar." Conversation. (2 units.)

13. **Grecian and Roman History.** Myer's "Greek and Roman History"; Wolfson's "Essentials in Ancient History"; West's "Ancient History"; or an equivalent. Class room discussions, note book work, and reports. (1 unit.)

14. **Mediaeval and Modern History.** Myers' "Mediaeval and Modern History." Robinson's "History of Western Europe"; or an equivalent. Recitations and reference notebook work. (1 unit.)

15. **English History.** Coman and Kendall, or Cheyney's "History of England", or an equivalent. Recitations, notebook work, and reports. (1 unit.)

16. **United States History.** Channing's "Student's History of the United States"; Muzzey's "American History"; or an equivalent. Recitations, notebook work, and reports. ( $\frac{1}{2}$  unit.)

17. **Civil Government.** Ashley's "American Government", or an equivalent. Reference work and class room discussion. The keeping of notebooks is desirable. ( $\frac{1}{2}$  unit.)

18. **Elementary Algebra.** This should include the following subjects: The four fundamental operations with emphasis placed on the type-forms in multiplication and division; factoring, the highest common factor, and lowest common multiple; fraction and fractional equations; simultaneous equations of the first degree; the binomial theorem for a positive integral exponent; evolution; the theory of exponents; radicals; quadratic equations; and the solution of problems in-

volving the various classes of equations. Emphasis should be placed on factoring and on the solutions of equations. (1 unit.)

19. **Advanced Algebra.** This should include the following subjects: Mathematical induction; the proof and the use of the remainder and the factor theorems; evolution, including the extraction of any root of algebraic polynomials, and also of arithmetic numbers; the theory of exponents; complex numbers; radicals and irrational equations; the theory of quadratic equations; simultaneous quadratics; inequalities; ratio, proportion and variation; arithmetic, geometric, and harmonic series; logarithms; permutations and combinations; limits and infinite series; the binomial theorem for any exponent; functionality and graphic representation; the theory of equations. Emphasis should be placed on the solution of equations by factoring, and on the demonstration of laws and principles. (1 unit.)

20. **Plane Geometry.** This includes the usual theorems and problems of elementary plane geometry. An important part of the work should be the solution of original exercises, including problems in mensuration. (1 unit.)

21. **Trigonometry and Solid Geometry.** The development of the general formulæ of elementary plane trigonometry; the theory of logarithms and the use of logarithmic tables; and the numerical solution of plane triangles, and of simple problems in heights and distance. The fundamental propositions of solid geometry and especially those of spherical geometry. (1 unit.)

22. **Chemistry.** Laboratory and text-book work for one school year, such as outlined in McPherson and Henderson's, Brownlee's, or Morgan's elementary texts. At least four hours per week throughout the year of actual laboratory practice is required to complete the amount of laboratory work desired. (1 unit.)

23. **Physics.** The equivalent of one year's work, including both laboratory and text-book work. Accurate notes of the

laboratory work should be kept. Gage's "Elements" or Carhart and Chute's "High School Physics" will serve to indicate the amount of text-book study required. (1 unit.)

24. **Botany.** A study of types of plant groups, both in the laboratory and in the field. Drawings and notes made directly from the specimens must be submitted as evidence of the character of the work done. A full year's work. (1 unit.)

25. **Zoology.** One year's work on the structure, relationship, and habits of animals. Laboratory note-books with drawings will be required. (1 unit.)

26. **Physiology.** An equivalent of Martin's "Human Body, Shorter Course." (1 Unit.)

27. **Physical Geography.** The study of one of the leading text-books, supplemented by at least forty exercises in individual laboratory work. (1 unit.)

28. **Freehand Drawing.** The study of light and shade and perspective, by drawing and shading with the pencil from geometric and simple life objects. ( $\frac{1}{2}$  to 1 unit.)

29. **Mechanical Drawing.** The use of drawing instruments in line work, the construction of geometrical problems, and simple projection. ( $\frac{1}{2}$  to 1 unit.)

30. **General Science.** The subject should be treated from the general scientific standpoint rather than from the standpoints of the several subdivisions. The course should deal with the elementary principles involved in gardening, sanitation, household operations, machinery, and various natural phenomena. (1 unit.)

31. **Social Science** (1 unit), which may be made up from the following:

(a) **Commercial and Industrial History.** This subject should include the development of the commercial and industrial activities of the western world from the time of the Roman



Empire to the present time. The course should be essentially a history of Western Europe from the economic standpoint. ( $\frac{1}{2}$  or 1 unit.)

(b) **Economic Geography.** This course should comprise a study of countries, products, and trade routes in relation to the economic interests of man. ( $\frac{1}{2}$  unit.)

(c) **Economics.** A knowledge of the fundamental principles of economic science, including such subjects as the division of labor, the factors of production, demand and supply, value and prices, and international trade. A good text should form the basis of the course. ( $\frac{1}{2}$  unit.)

(d) **Sociology.** A systematic study of the underlying features of social progress, with constant reference to actual conditions in contemporaneous society. A good recent text should be used, carefully selected readings assigned, and student exercises required. (  $\frac{1}{2}$  unit.)

(e) **Commercial Law.** This course should include a study of the rights and privileges and corresponding duties and obligations of men in commercial pursuits. The common law and statute law in ordinary business transactions should be studied.

32. **Vocational Subjects.** One, two, or three units of well established courses of vocational work in accredited high schools may be presented among the electives.

**Note**—In the case of students graduated from a recommended high school, credit may be allowed for such subjects, not designated in this list, as are recommended by the principal and approved by the University faculty. Candidates who offer subjects in Science will be required to present their note-books.

## MATRICULATION AND REGISTRATION

On or before the appointed registration days in September and February, each student must register at the Registrar's office, and must have entered upon a study card the subjects desired for the semester.

The enrollment card must be signed by the Registrar, the Treasurer, and all the Professors conducting classes entered upon it, and must be returned to the office of the Registrar within ten days after the last registration day, or a fee of one dollar will be charged.

Students wishing to register for as few as ten or for more than eighteen units must petition the Scholarship Committee at the beginning of the semester.

No student may change his registration without presenting his reason on official blanks to the Scholarship Committee and securing their approval.

Students will not be given credit for work that is not recorded in the Registrar's office.

In the choice of subjects, all work necessary to remove conditions must be provided for first; and required subjects must take precedence of elective subjects.

In order that students may have careful consideration in selecting the subjects to be taken, the Registrar's office is kept open throughout the year. Students are urged therefore to present their credentials and complete their registration prior to the appointed registration days.

## THE UNDERGRADUATE CURRICULUM

### THE ARTS COURSES

The College offers regular undergraduate courses with major subjects as follows: Biology (Zoology or Botany), Chemistry, Economics and Sociology, Education, the English Language and Literature, French, German, Greek, History, Latin, Mathematics, Philosophy and Psychology, Physics, and Spanish. Each of these courses is designed to give a liberal education, extends through four years, and leads to the degree of Bachelor of Arts.

Each course requires completion of one hundred and twenty units of college work, exclusive of the requirements in Physical Education. In this connection a "unit" means one exercise a week throughout a semester, each exercise to represent, for the average student, one hour of recitation or lecture and

two hours of preparation or of subsequent reading per week, or an equivalent amount of work in laboratory courses.

Courses designated as Lower Division courses are usually to be taken in the Freshman and Sophomore years and Upper Division courses in the Junior and Senior years. Sixteen units per semester for the Lower Division and fourteen for the Upper Division is considered full work.

Students who have no entrance conditions, and who have completed thirty semester units of the Freshman year in addition to the first-year work in Physical Education are classed as Sophomores. Those who have completed sixty semester units in addition to the full requirements in Physical Education and including all required work except Philosophy, are classed as Juniors. Those who have completed ninety semester units, including all required work, are classed as Seniors.

In no case will the degree of Bachelor of Arts or Bachelor of Science be conferred unless the candidate has completed one academic year **in residence** in this College.

### **The Elective Standard Courses**

At the beginning of his Freshman year every student will make choice of some one of the above-mentioned major departments as that to which he wishes mainly to devote his attention during his four years of work. This decision, however, is not necessarily final, as the courses are so arranged that a change of major subject, if approved by the heads of both departments concerned, can be arranged without great difficulty at the beginning of the Sophomore year.

Having so made choice of his major subject, the student will immediately report to the professor at the head of the department for consultation as to the details of his course.

Each major department offers one standard course or more.\* Each of these standard courses contains the following classes of courses:—

---

\*The detailed outlines of the various standard courses may be obtained upon application at the office of the Registrar.

**A. The General College Requirements\*** that must be completed by all Arts students. These are:

**English 1.** One year; six units.

**English 30 or 30a.** One year; four units.

**Science.** One year; eight or ten units. (The science may be Chemistry, Physics, Botany, or Zoology.)

**Foreign Language.** Two years; sixteen units. (The language may be Latin, Greek, German, French, Spanish, or Italian. If the language offered for entrance is continued, the requirement is reduced to six units.)

**Psychology.** One year; six units.

**History or Economics.** One year; six units.

**Physical Education.** Two years; four units.

**B. The subjects required in his major department** for the granting of the degree from that department.

**C. A minor subject** of at least ten units, the minor subject being related to the major subject.

**D. Certain additional advised courses**, such as in the opinion of the head of the major department will most advantageously interlink with the major and minor subjects.

**E. Certain elective units** to be selected by the student with the advice of his major professor.

## THE COURSES IN ENGINEERING

The four-year courses in the Departments of Civil Engineering and Electrical Engineering and the two-year course in the Department of Mining and Chemical Engineering are

---

\*The Freshman year should be devoted to the completion of at least thirty units of these required subjects, and all, except Psychology, must be completed to secure Junior standing.

more exclusively technical than the Arts courses just described. The courses therefore differ from the foregoing in their regard to the general college requirements, in their greater rigidity of outline, and in the increased number of hours assigned to the work of the various years. These technical courses lead to the degree of Bachelor of Science. For a description of the work, together with the full outlines of the required courses, see articles on **Engineering Courses** as indicated in the Index.

### OPTIONS IN THE PROFESSIONAL SCHOOLS

**Law.**—When 94 units, including all the general college requirements and a minimum of 24 units in the major department, have been completed in the College of Liberal Arts, and of these not less than 32 have been taken in the College of Liberal Arts of this University, the student may take the studies of the first year of the College of Law, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years in that college. Special consideration should be given to the following subjects: English (including Expression); Latin (at least two years if not covered by entrance credits); History (English and American), with special reference to Institutional and Constitutional; Logic; Philosophy; Economics and Sociology; and Political Science. For a description of the recommended pre-legal course see under College of Law.

**Medicine.**—When 94 units have been completed in the College of Liberal Arts, a student may take the first year in the College of Physicians and Surgeons, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years' work in that college. To this end the required subjects in the College of Liberal Arts are the same as those for the regular candidate for the degree of A.B., except that Biology should be the elected major and German or French the elected language (Latin being offered for entrance), and that in Science there is a requirement of one year **each** of Physics and Chemistry.



## ATTENDANCE, EXAMINATIONS AND GRADES

**Attendance** upon all class and laboratory exercises indicated upon the enrollment card is required. Absences are counted from the day on which instruction begins. All absences are reported to the office at the end of each semester. If the number of absences exceed one in a one-unit course, three in a two-unit course, five in a three-unit course, seven in a four-unit course, or nine in a five-unit course, the mark "**Con.**" will appear in place of a grade and can be removed only by special arrangements with the instructor.

**Regular examinations** are held at the close of each semester in the studies that have been pursued in the different classes. After the examination the parent or guardian of every student receives from the office a report giving the student's standing in each subject for the semester. Grade A denotes the highest excellence; grades B and C rank in a descending scale of merit; grade F signifies failure to pass. The grades A, B, and B— are termed "recommended grades," and pass the student in any subject. A grade of C passes the student in any subject not in his major department. If the subject is reported "conditioned" or "incomplete," such delinquency must be made up, in such manner as the instructor may determine, within one year from the date of the failure. If the delinquency be not thus made up, the student is required to take the subject again with a class, before credit in said subject may be obtained. A grade of F may be removed only by repeating the study in class.

**For special examinations** a fee of two dollars is charged.\* Such are:

1. Examinations for college entrance not taken at the regular times.
2. Examinations for college credit on work for which special credentials can not be supplied.

---

\*Instructors are authorized to give such examinations only on presentation of the Treasurer's receipt for the fee in question.

3. Special examinations to make up mid-semester or final examinations, whether the delinquency is caused by failure to pass or by absence.

## GRADUATION

**Requirements.** Upon the completion of one hundred and twenty units (exclusive of those in Physical Education) of the courses organized as above described, the student will be granted the degree of Bachelor of Arts or of Science as above stated; **provided**, that the College residence requirements have been satisfied; that ninety of the total number of units required for graduation, exclusive of those in Physical Education, are of recommended grade; and that at least four-fifths of the work in the major department is of recommended grade.

**Graduation with Honors.**—A student who has received 110 units of grade A and no grade below B—will be graduated **magna cum laude**.

A student who has received 80 units of grade A and no grade below B—will be graduated **cum laude**.

Under no circumstances will either of these honors be conferred upon a student who has spent less than two full years in this University.

## THE GRADUATE DEPARTMENT ORGANIZATION

The Graduate Department of the College of Liberal Arts of the University of Southern California was formally organized during the year 1910-11. General oversight of the Department is intrusted to the Graduate Council, which is a standing committee of the Faculty and appointed by the President of the University. The administrative officers of the Graduate Council for 1914-1915 are Thomas B. Stowell, Chairman, and Rockwell D. Hunt, Secretary, who may be called upon for information and advice.

## PURPOSE

It is the purpose of the Graduate Department: (1) To give due prominence to graduate courses of instruction offered by the University; (2) to insure systematic and efficient administration of this advanced work; (3) to provide separate instruction for graduate and upper division students.

## THE GRADUATE COUNCIL

The Graduate Council consists of the following members of the Faculty:

George Finley Bovard, D.D., LL.D.,

President of the University.

Thomas B. Stowell, Ph.D., LL.D., Chairman.

Rockwell D. Hunt, Ph.D., Secretary.

James Harmon Hoose, Ph.D.

Paul Arnold, Ph.M.

Roy Malcom, Ph.D.

Gilbert E. Bailey, Ph.D.

J. H. Montgomery, M.S., E.E.

James M. Dixon, L.H.D.

Festus E. Owen, A.M.

Edgar von Fingerlin, Ph.D.

Samuel Rittenhouse, Ph.D.

Allison Gaw, Ph.D.

Laird J. Stabler, M.S., Ph.C.

Benjamin F. Stelter, Ph.D.

It is the function of the Graduate Council: (1) To define conditions of admission to the Graduate Department; (2) to provide courses of graduate instruction, and to pass judgment upon the graduate courses offered by the respective departments, no one of which courses shall become operative without the approval of the Council; (3) to pass upon the credentials of all candidates for graduate standing; (4) to establish and to maintain the requirements for all graduate degrees; (5) to formulate regulations for the effective organization and administration of the Graduate Department.

## ADMISSION TO THE GRADUATE DEPARTMENT

Admission to the Graduate Department of the College of Liberal Arts is granted to graduates of this College and to graduates of other colleges and scientific schools of recog-

nized standing who present satisfactory evidence of character and qualifications. Other persons of suitable age and satisfactory attainment may be admitted to the advantages of the graduate courses upon approval by the Council. Admission to the courses of the Graduate Department does not necessarily imply admission to candidacy for a graduate degree.

An undergraduate student who is within 24 units of the Bachelor's degree may be permitted, with the approval of the Graduate Council and the major professor, to take graduate courses, provided that he be not carrying more than 12 units of undergraduate work. Such a student may register for only sufficient graduate work to bring the total number of units carried to fifteen. In all such cases a student must at the opening of the semester petition the Graduate Council for admission to the graduate courses he desires to take. If such a student afterwards matriculates for the degree of Master of Arts, the graduate courses previously taken by him are entered as "already completed" in his curriculum.

The steps required for admission to the Graduate Department are: 1. Consultation with the Chairman of the Graduate Council; 2. Consultation with the head of the department in which the student desires to do his major work; 3. Appearance in person before the Graduate Council for such further interrogation as that body may deem advisable. At the time of making application the student should present his credentials, including (1) his baccalaureate diploma; (2) certified transcripts from the records of institutions previously attended, listing all his preceding courses with their unit-values and the grades attained in each course; and, in the case of applicants seeking a high school teacher's credential, (3) certificates testifying to the quality of any previous teaching experience and the number of months during which such experience continued. Documents of the second and third classes above specified are retained by the University as matters of permanent record. If they are not immediately at hand at the time of the applicant's seeking admission, registration of the student is merely tentative, pending their presentation.

## DEPARTMENTS OF GRADUATE STUDY

The University is at present offering graduate courses in the following subjects:

Biology (animal), Biology (plant), Chemistry, Economics and Sociology, Education, English, French, German, History, Latin, Mathematics, Philosophy and Psychology, Physics.

## THE DEGREE OF MASTER OF ARTS

The attainment of the degree of Master of Arts (A.M.) depends upon the completion of a well-rounded and carefully organized undergraduate and graduate course, at the end of which the candidate shall offer proof of high and sound intellectual attainment in his major subject, together with maturity of thought and some breadth of view. Under no circumstances will the degree be conferred until the candidate has completed, beyond this University's requirements for the Bachelor's degree, twenty-six units of graduate work, inclusive of the thesis; but **the mere satisfaction of any time or course-unit requirement, taken by itself, confers upon the candidate no right to the degree, his achievement of it depending mainly upon his natural abilities and his stage of scholarly advancement.** Undergraduate courses taken at other institutions are accepted at their full value so far as they conform to the standards of the various undergraduate departments of this University. Graduate courses from other institutions are similarly recognized, subject to the conditions of study "in residence" as hereafter prescribed.

Each candidate for the degree of Master of Arts must be registered in the Graduate Department of the College of Liberal Arts not later than the first Tuesday in October preceding his final A.M. examinations, and must pursue his course "in residence" for not less than one academic year. In this connection the term "in residence" is to be interpreted as meaning that the student is taking not less than four graduate units per semester, with the proviso that, as a rule, at least twelve of the units credited toward the attainment of the degree must be pursued at this University.



For "residence" two summer sessions may be counted as equivalent to one semester.

The candidate who has not previously done graduate work in this University will begin his registration by applying for admission to the Graduate Department by the method above indicated. He will then state the course of study which he wishes to pursue, which course must consist of a principal or "major" subject closely related to the major subject of his undergraduate course, and one or two subordinate or "minor" subjects satisfactorily related to the major subject and requiring not more than one-half the time given to it.\* The details of his course in this University will be determined upon consultation with the head of the department in which he wishes to major; and no subjects or units lacking the approval of the departmental head will be credited toward the degree.

A part of the course will consist of the completion of a thesis or dissertation embodying the results of an investigation on some subject in the major department. It is not the intention of the Graduate Council that this shall be a piece of highly recondite research such as would befit candidacy for the degree of Doctor of Philosophy; but it must be a serious, considerable, and printable piece of work demonstrating the writer's power of original thought, his thorough grasp of the subject matter involved, and his ability to present his material in a scholarly manner and style. The title of this essay must be presented for approval by the Graduate Council not later than six months before the month in which the degree is sought; a fairly complete bibliography must be similarly presented a month later; and the completed thesis, conforming in detail to the printed regulations furnished by the University, must be submitted to the Graduate Council six weeks before the conferring of the degree. In

---

\*Attention is called to the fact that in connection with the College of Liberal Arts the word "minor" is used in three different senses. An "undergraduate minor" consists of ten units in any subject related to his undergraduate major subjects. A "minor recommendation" for the High School Teacher's Certificate may be granted when the student receives his major recommendation if he has had at least six units of work in the minor subject above Sophomore grade. A "minor" for the degree of Master of Arts must consist wholly of work of graduate standard.

the case of those who are candidates for the conferring of the degree in June, these ultimate dates will be the first of December, the first of January, and the last Saturday in April, respectively. To an accepted thesis will be assigned a minimum value of four units in the graduate course.

Upon the satisfactory completion of such an undergraduate and graduate course, tested by such methods as the various departments shall prescribe, and upon the acceptance of the thesis by a board of examiners appointed by the Graduate Council, the candidate will be recommended for the degree of Master of Arts.

### **THE DEGREE OF MASTER OF ARTS IN CONNECTION WITH THE COURSE IN MEDICINE**

Upon students who are pursuing the course in the Medical Department of the University the degree of Master of Arts may be conferred upon the following conditions:

1. The student must hold the Bachelor's degree from the College of Liberal Arts or from some other institution approved by the College.
2. He must have matriculated in the Graduate Department of the College of Liberal Arts at least two years before receiving the Master's degree.
3. His research work must be planned in conjunction with the Graduate Council of the College of Liberal Arts. Reports of progress must be made at such times as may seem advisable to the Council, and the results of such work must be embodied in a thesis approved by the Council.
4. The regulations of the College of Liberal Arts shall prevail concerning thesis and fees.

### **THE HIGH SCHOOL TEACHER'S CERTIFICATE**

The State Board of Education prescribes general rules under which county boards and city and county board of education may grant regular certificates of high school grade. These rules, together with the requirements of the University

of Southern California, under which recommendations for such certificates are made, are summarized below.

### **Group 1—Standard Group**

1. Bachelor's degree from a standard college requiring not less than eight years of high school and college training.

2. One year (twenty-six units) of graduate work which must include one full year's course in at least one subject (major subject) in which recommendation is sought.

3. The satisfaction of the departmental requirements (page 19).

4. Fifteen units in Education, which may be completed in either undergraduate or graduate standing, or the two combined. These courses must include:

- (a) School Management, 2 units.
- (b) Secondary Education, 2 units.
- (c) Practice Teaching, 4 units.
- (d) Teacher's Course in major subject, 2 or 3 units.
- (e) Electives, 5 or 4 units.

### **Group 2—Normal Graduate Group**

Must be graduate of a California State Normal School or other accepted Normal school.

- 1. Bachelor's degree as in Group 1.
- 2. One-half year (fourteen units) of graduate work.
- 3. Departmental requirements, as in Group 1.
- 4. Five units in Education, which must include
  - (a) Secondary Education, 2 units.
  - (b) Teacher's Course in major subject, 3 units.

### **Group 3—Experienced Teachers Group**

A. Candidate having taught not less than one year (eight months) with success in any elementary or secondary school.

- 1. Bachelor's degree as in Group 1.
- 2. One year of graduate work, as in Group 1.
- 3. Departmental requirements, as in Group 1.
- 4. Eleven units in Education, which must include
  - (a) Secondary Education, 2 units.
  - (b) Teacher's Course in major subject, 2 or 3 units.
  - (c) Electives, 7 or 6 units.

B. Candidates who have taught or been engaged in school supervision for not less than twenty months.

1. Bachelor's degree as in Group 1.
2. One-half year of graduate work, as in Group 2.
3. Departmental requirements, as in Group 1.

#### **Group 4—Special Normal Course Group**

Candidates who desire to spend one-half year at the University and complete their work at a State Normal School offering a special course for college graduates.

1. Bachelor's degree as in Group 1.
2. One-half year of graduate work, as in Group 2.
3. Departmental requirements, as in Group 1.
4. Five units in Education, as in Group 2.
5. One-half year (following the graduate study) in an approved Normal school.

The departmental requirements mentioned above are in addition to the technical requirements laid down by the State Board of Education. The University of Southern California requires as preliminary to any recommendation for the teacher's certificate, the completion of enough work (and of sufficiently high grade) in at least one subject to secure a University recommendation that the candidate is fitted to teach that subject in high school classes. If the candidate's undergraduate preparation in the stated subject has been satisfactory, this may be obtained in the time-limits specified above.

The departmental requirements for such recommendation are stated under their proper headings in the section devoted to "Departments of Instruction."

Departmental Recommendations are also issued in minor subjects as well as in the major subject or subjects. For the minor recommendation the candidate is required to complete satisfactorily six units of graduate or upper division work in that subject. In addition, the candidate must satisfy the University of his general fitness for the work proposed. (Work done to secure such a minor recommendation for teaching may or may not serve toward a minor subject for



the degree of Master of Arts according as it is or is not of a purely graduate nature properly prepared for, and in a subject related to the candidate's major work.)

Credit toward the teacher's certificate is given for graduate work done at other universities accredited by the California State Board of Education; provided that, as a rule, at least eight units of the major subject, and two units of the minor work shall be done in residence at this University, and that under such circumstances no recommendation shall be issued without the approval of the department involved.

### **LATE AFTERNOON AND SATURDAY CLASSES**

The University offers special classes, primarily for teachers engaged in active work, on Saturdays and at late afternoon hours. The amount of work that can be done in these courses toward satisfying the requirements for the Departmental Recommendation will depend on the courses offered. More extensive facilities are offered during the six-weeks Summer Session. But the University strongly recommends the advantages of a period of daily attendance in the regular University session.



## DEPARTMENTS *of* INSTRUCTION

### AGRICULTURE

The subjects that underlie practical agriculture are taught in the courses listed below. In these may be laid a foundation, broad as the range of practice and interests of the farmer at the present day, and upon which the student may build a career as an agriculturist or develop into a specialist in some one department of that field. For full descriptions of the respective courses, see under the various departments referred to.

**Soils.** Their origin, composition, and classification (Geology 6). Their cultivation, fertility, and adaptation to crops (Geology 7). Their mineral composition (Geology 2). General Geology (Geology 5).

**Plant Life.** (Botany 1-5a, 7-8.) Especially the relation of plants to their environment of soil, water, physiography, etc. (Botany 3), plant propagation with practice in garden and field (Botany 5a), and economic botany (Botany 5).

**Animal Life.** (Botany 1-10.) Especially the study of orchard, field-crop, and garden pests (Zoology 8).

**Chemical Analysis.** (Chemistry 1-5, 10-12.) Especially analysis of water, soils and fertilizers (Chemistry 10), and of dairy, meat, food and farm products (Chemistry 12).

**Water Supply.** Involving hydraulics and irrigation. (Civil Engineering 9, 10, 11.)

**Materials of Construction.** Properties of stones, cements, concrete, timber, etc. (Civil Engineering 13). Reinforced concrete (Civil Engineering 21).

**Sanitation.** Including sanitary science and bacteriology (General Biology 2-3), the relation of various parasites to

disease (Zoology 9), and sanitary engineering (Civil Engineering 12).

**Contracts and Specifications.** Law of contracts in engineering, with study of riparian rights, boundary lines, etc. (Civil Engineering 22).

**Economic Aspects.** Land surfaces, soil, and climate in their relation to industries (Geology 1, 4). Principles of economics, and economic geography (Economics 1, 4). Transportation and communication (Economics 5).

**Miscellaneous Courses.** Land surveying (Civil Engineering 1, 2); light, heat, and electricity (Physics 1-3); shopwork for instruction in the use of wood and metal tools (Physics 4); machine-drawing (Drawing 1-3); road construction (Civil Engineering 19).

**Teachers' Course in Agriculture.** Lecture and field-work, especially adapted to the conditions of the Southwest. (Summer Session, Agriculture 1.)

## ART AND DESIGN

W. L. JUDSON, Professor

A. C. WEATHERHEAD, AVA C. WELLS, LORENA BERNARDINE  
HILTY, Instructors

1. **Elementary Drawing** from the antique in charcoal. Open to all students. Two units; either semester. (Weatherhead.)

2. **Advanced Drawing** from the antique. A continuation of Course 1. Two units; either semester. (Weatherhead.)

3. **Still-Life** in charcoal and color. Open to students with two units of drawing. (Weatherhead.)

4. **Drawing of the Figure** in costumed life class. Open to students with two units of drawing. (Wells.)

5. **Elementary Outdoor Sketching.** Pen, charcoal, or brush. Open to all students. First semester. (Weatherhead.)

6. **Advanced Outdoor Sketching.** Pastels, water color, or oil. Open to students with four units of drawing on the recommendation of instructor. Either semester. (Weatherhead.)

7. **Design.** Theory and practice. Open to students on recommendation of the instructor. First semester. (Hilty.)

8. **Poster Design.** Continuation of Course 7. Open to students on recommendation of the instructor. Second semester. (Hilty.)

9. **Clay Modeling.** One unit; either semester. (Wells and Hilty.)

Notes—Course 1 or its equivalent must precede all other courses.

All students entering drawing courses are required to take six hours a week.

## BIOLOGY

ALBERT B. ULREY, Professor (Zoology)

ANDREW C. LIFE, Associate Professor (Botany)

SAMUEL RITTENHOUSE, Associate Professor (Zoology)

FRANK S. DAGGETT, Lecturer (Animal Distribution)

HARRY S. SWARTH, Lecturer (Animal Ecology)

ELMER HIGGINS, Instructor (Zoology)

J. ROSS BECK, MERWIN OAKES, DORRIS COOMBER, MILDRED FINCH, ALLEN T. HOBBS, Laboratory Assistants.

Courses adapted to the needs of students who do not major in Biology but who desire some knowledge of organic nature and training in scientific methods: General Zoology, Bio-nomics and Zoology 8, or Botany 1 and 2 or 4.

Courses affording preparation for directors of Physical Education and Health and Development: Zoology 1-7; General Biology 1-4.

Courses preparing for Agriculture: Zoology 1-9; Botany 1-5 and 7-8; General Biology 1-4; certain courses in Chemistry, Physics and Geology; general studies required in the course to be pursued. The equipment of the department is described on page 158.

**Zoology****LOWER DIVISION COURSES**

**1. General Zoology.** This course is designed to give a general knowledge of the animal kingdom and an introduction to more advanced courses in biology. In the laboratory each student studies with the microscope, or dissects, typical animals selected from the different groups from the simple to the more complex forms. The lectures co-ordinate the laboratory work, show the natural relationships of animals and explain the general problems of biology. Four units; throughout the year. (Rittenhouse, Higgins.)

**2. Physiology.** Lectures and laboratory work on the activities of living organisms. Special study of the physiology of the human body. Prerequisites, course 1 or Botany 1. Three units; second semester. (Ulrey and Assistant.)

**3. Systematic Zoology.** The course deals with certain groups of vertebrates with reference to (a) taxonomy and bibliography of some group; (b) ecology, giving particular attention to the animal in its usual environment. Laboratory study with field work and lectures. Prerequisite, course 1. Three units; first semester. (Ulrey, Daggett, Swarth.)

**UPPER DIVISION AND GRADUATE COURSES**

**4. Histology.** This course gives the student an opportunity to study the chief tissues of the mammalian body; and to learn the methods of preparation of tissues, with practice in cutting, staining and permanently mounting sections. Laboratory work and lectures. Prerequisite, course 1. Three units; first semester. (Rittenhouse.)

**5. Embryology.** A course which deals primarily with the study of the development of the hen's egg and the formation of the organs in the embryo chick. In the laboratory the student learns to make his own serial sections. The lectures include the general problems of comparative embryology, with special application to the chick and the frog. Pre-



requisites, courses 1 and 4. Three units; second semester. (Rittenhouse and Assistant.)

**6. Comparative Anatomy of Vertebrates.** The laboratory work consists of dissection of the main types of the vertebrate animals, and a study of the relationships of the different systems of organs. The lectures deal with a comparative study of the organs of the vertebrate body, especially from the standpoint of development. Prerequisites, courses 1, 4 and 5. Three units; first semester. (Rittenhouse.)

**7. Mammalian Anatomy.** The course consists of a careful dissection and study of type mammals, especially the rabbit, cat and dog; with collateral reading in human anatomy. In the lectures special attention is given to the nervous, blood and skeletal systems, including an outline of their development. Prerequisite, course 1. Three units; second semester. (Rittenhouse.)

**8. Economic Entomology.** A study of orchard, field crop, and garden insect pests, the forest insects and household visitors. Consideration is given the control and eradication of insect depredations, the composition and application of insecticides, and farm management to eliminate injurious insects. Lectures and laboratory work. Prerequisite, course 1 (or an equivalent amount of Botany together with the insect aspects of course 1). Three units; second semester. (Rittenhouse.)

**9. Parasitology.** The organization, life history, and evolution of parasites; the protozoa and their relation to disease; the role of insects, ticks, and mites in the transmission and propagation of disease, together with their control as a phase in medical entomology; and a study of the helminthes and larger parasites. Lectures and laboratory work. Prerequisite, course 1 (or equivalent in Botany) and General Biology 3 (Bacteriology). Three units; first semester. (Rittenhouse.)

**10. Special Zoology.** An investigation of some topic of limited scope. This course is planned to meet the needs of each student prepared to pursue it. Six hours per week,



throughout the year. Prerequisites, courses 1, 2, 3, 4, and 5, or their equivalent. Three units; throughout the year (Ulrey).

**Major Work in Zoology.** Courses 1-6; General Biology, courses 3, 4, and 6.

**High School Teachers' Recommendation in Zoology:** 1 General Zoology; 2, Physiology; 3, Systematic Zoology; 6, Anatomy of Vertebrates. General Biology: 1, Personal Hygiene; 2, Sanitary Science; 3, Bacteriology; 4, Bionomics.

### **General Biology**

#### **LOWER DIVISION COURSES**

**1. Personal Hygiene.** Lectures and recitations on the preservation and improvement of health. The course deals with the functions and care of the body with a view to attaining the greatest possible degree of efficiency. Open to all students. Two units; first semester. (Ulrey.)

**2. Sanitary Science.** A course of lectures on public hygiene. The study includes (1) the nature of infectious diseases, their dissemination and control; (2) the problems of water supply and sewage; (3) the distribution and care of foods in relation to this public health; (4) sanitary surveys of residences, resorts, and public buildings; (5) the various agencies for the federal, state and municipal supervision of public health. Two units; second semester. (Ulrey.)

**3. Bacteriology.** A study in the laboratory and by means of lectures of the nature of the bacterial organism; its relation to disease; methods of cultivating and isolating it; inoculation experiments; staining of sections; examination of water; etc. Prerequisite, Botany 1 or Zoology 1. Three units; first semester. (Ulrey.)

**3a. Principles of Biology.** A lecture course on the general principles of Biology. Elective for students who have no zoology or botany, but wish some knowledge of animal and plant life. Two hours per week; second semester. (Ulrey.)

UPPER DIVISION COURSES

**4. Bionomics.** A course of lectures dealing with the fundamental principles of Biology. The problems of inheritance, development, and sex are considered from the cytological standpoint throughout the first semester. Variation, heredity, selection, regeneration, and kindred topics are studied during the second semester. Prerequisites, General Zoology or General Botany. Two units per week; throughout the year. (Ulrey.)

**5. Microscopical Technique.** A course dealing with special methods of Microscopy. Laboratory work and lectures. Two units; either semester. (Ulrey.)

**6. Seminar.** The advanced students and instructors of the department meet for reports on special investigation and present-day problems of biology. One unit; throughout the year. (Ulrey, Rittenhouse.)

**7. Journal Club.** Reports on the current literature of Biology. One unit; throughout the year. (Ulrey.)

**At the Venice Marine Station**

Primarily for Graduate Students

**8. Biological Survey.** A study of the marine animals and plants of the region, including their habitat, classification, distribution, and life habits. (Ulrey, Rittenhouse.)

**9. Experimental Biology.** The course consists of a study of some special problem of biology for which the student's training prepares him. (Ulrey, Rittenhouse.)

**10. Research.** A limited number of private laboratories are available for free use by investigators who are prepared to carry on such work. Investigation may be carried on throughout the year. Application for these privileges should be made to the director of the station. (Ulrey, Rittenhouse.)

**11. Summer Course 1915.** The course consists of a study of Marine Biology in connection with the explorations carried on by the use of the station launch, the Anton Dohrn. The work is given at the laboratories of the Venice Marine Biological Station. Formal instruction is given only during the regular summer session of the University.

## **Botany**

### **LOWER DIVISION COURSES**

**1. General Botany.** The course comprises a study of typical plants representing the vegetable kingdom. The general morphology and structure of types of thallophytes, archegoniates, and spermatophytes are studied. Attention is also given to habitat, environment, and general physiological processes, and the agricultural phases of plants. Laboratory study, field work, and lectures. Four units; throughout the year. (Life, and assistants.)

**2. Field Botany and Taxonomy.** A study of flowering plants (spermatophytes) in the local flora. The course deals with habitats, pollination, hybridization, and the relationship of plants. Lecture and six laboratory hours per week, one semester. Three units; either semester. (Life.)

**3. Ecology.** The relation of plants to their environment of soil, water, physiography, etc., and their structural adaptations. Especially suited to agricultural students. Lectures, field and laboratory work. Prerequisite, course 1. Two units; second semester.

**4. Plant Physiology.** Experimental work on the physiology of plants; lectures and supplementary reading. This course includes general experiments on the work and processes carried on by living plants, and experiments on the fundamental processes with precise recording apparatus. Prerequisite, course 1. Three units; first semester. (Life.)

### **UPPER DIVISION COURSES**

**5. Economic Botany.** This course deals mainly with the parasitic fungi and other harmful plants. One lecture and

three laboratory hours per week. Two units; either semester. (Life.)

**5a. Plant Propagation and Genetics.** A study of the principles of plant propagation with some practice in garden and field; also problems of variation and heredity in relation to phylogeny and the improvement of plants. Lectures, quizzes, and field work. Two units; second semester.

**6. Teachers' Course.** A series of experiments and exercises on the growth, structure, and propagation of plants. The place of Botany in the high school curriculum and the principles that determine the selection, organization, and use of botanical materials in the high school are discussed. Two units; first semester. (Life.)

**7. Plant Anatomy and Histology.** The minute structure of the systems of tissues. Microscopical technique in preparing permanent mounts. Laboratory work and lectures. Prerequisite, course 1. Two units; either semester. (Life.)

**8. Marine Algae.** The morphology, classification, and ecology of the marine flora, including collecting, mounting, and preserving the algae of the adjacent coast. Three units; either semester.

**9. Advanced Botany.** Special problems in advanced study of plants for which the student is fitted by previous training. Three units; either semester.

**10. Botanical Journal Club.** One unit; throughout the year. (Life.)

**Major Work in Botany.** Courses 1-7; upper division courses, eight units; General Biology 3, Bacteriology.

**High School Teachers' Recommendation in Botany:** 1, General Botany; 2, Field Botany and Taxonomy; 4, Plant Physiology; 5, Economic Botany; 5a, Plant Propagation and Genetics; 6, Teachers' Course, 9, Marine Algae. General Biology: 3, Bacteriology; 4, Bionomics.



**CHEMISTRY**

LAIRD J. STABLER and L. S. WEATHERBY, Professors  
EUGENE M. HUGHES, Instructor; GEORGIANA E. QUICK, Store-  
keeper; CLAUD E. SWIFT, RALPH T. GOODWIN, GRACE  
ASHMORE, LELAND L. REBBER, HUGH J. MULTER and  
WALTER M. LONGMOOR, Laboratory Assistants.

**LOWER DIVISION COURSES**

Students without entrance credit in Chemistry should register in courses 1 and 1a; those with entrance credit should register in 2 and 2a. Courses 2, 2a, 3 and 3a are prerequisite to all later courses in chemistry and comprise the required work in the engineering courses.

**1. General Inorganic Chemistry.** A lecture and recitation course, covering the principles of inorganic chemistry. Open only to students who do not present entrance credits in chemistry. To be accompanied by course 1a. Three units; first semester. (Weatherby.)

**1a. General Inorganic Chemistry.** A laboratory course to accompany course 1. Six periods a week in the laboratory. Two units; first semester. (Hughes.)

**1s. Elementary Organic, Food, and Textile Chemistry.** Lectures and recitations introducing the composition and chemistry of the simpler organic compounds related to daily life. The course includes a special study of foods and food values, fuels, fabrics, dyes, perfumes, poisons, adulterants, natural and artificial coloring compounds, and kindred topics. It is recommended to all non-technical students and is open to all who have had entrance chemistry or courses 1 and 1a.

(It is advised that students desiring this course who have had entrance chemistry, register the first semester in courses 2 and 2a.)

To be accompanied by course 1s.a. Three units; second semester. (Weatherby.)

**1s.a. Elementary Organic, Food, and Textile Chemistry.** A laboratory course involving the preparation and study of the properties of the simpler characteristic organic com-



pounds, and practical experimentation on the processes and substances involved in course 1s. Six periods a week in the laboratory. Two units; second semester. (Hughes.)

**2. Inorganic Chemistry.** Non-metals. Lectures and recitations with classroom demonstrations. Especial emphasis is placed on the principles and laws of inorganic chemistry, and their application in analytical work. To be taken in connection with 2a. Three units; first semester. (Weatherby.)

**2a. Qualitative Analysis. Metals.** A laboratory course covering the reactions of the salts of the metals in known solutions, and the separation and identification of the same in unknown mixtures; the analysis of metals, amalgams, and alloys. Six hours a week in the laboratory. Two units; either semester. (Weatherby.)

**3. Inorganic Chemistry.** Metals. Lectures and recitations on the metals and metalloids, and their chief compounds, with especial reference to their technical value and commercial use. To be taken in connection with courses 2a or 3a. Three units; second semester. (Weatherby.)

**3a. Qualitative Analysis.** Non-metals. A laboratory course covering the reaction of the salts of the non-metals and their identification, and the complete analysis of simple and complex salts, ores, and commercial products. Six hours a week in the laboratory. Two units; second semester. (Weatherby.)

**4. Quantitative Analysis.** Laboratory practice in gravimetric and volumetric determinations, with occasional lectures and recitations. Talbot's "Quantitative Chemical Analysis." Nine hours per week in the laboratory. Three units; throughout the year. (Stabler.)

#### UPPER DIVISION AND GRADUATE COURSES

**5. Advanced Qualitative Analysis.** A laboratory course involving difficult qualitative separations and the detection of some of the rare elements. Weekly lectures and discussions.

Prescott and Johnson's "Qualitative Analysis" is recommended for reference. Three units; either semester. (Stabler.)

**6. Inorganic Preparations.** A laboratory course, including the preparation of inorganic compounds, with tests for purity and strength. Prerequisite, course 4. Two units; either semester. (Stabler.)

**7. Organic Chemistry.** Lectures and recitations on the chemistry of the carbon compounds. Perkin and Kippings' "Organic Chemistry." Two units; throughout the year. (Weatherby.)

**7a. Organic Preparations.** A laboratory course in the preparation of typical carbon compounds in both the aliphatic and the aromatic series, to accompany course 7. Two units; throughout the year. (Weatherby.)

**7b. Organic Preparations—Advanced.** A laboratory course in the preparation of higher organic compounds, with supplementary reading on theory and methods. The nature of the work is represented by such texts as Gatterman, Cohen, or Emil Fischer. This course is recommended to seniors and graduate students who expect to do technical work in the field covered by organic chemistry, or who desire to pursue research in chemistry for higher degrees. Either or both semesters. (Weatherby.)

**8. Mineral Analysis.** Gravimetric and volumetric analysis of representative minerals, ores, and alloys. Prerequisite, course 4. Three or five units, either semester. (Stabler.)

**9. Physical Chemistry.** A lecture course extending throughout both semesters. A general study of electrochemistry is included in the work of the second semester. Bigelow's "Theoretical and Physical Chemistry" is used as a main reference book. Two units; throughout the year. (Weatherby.)

**9a. Physical Chemical Measurements.** A laboratory course to accompany or follow course 9. Molecular and atomic weight determinations by vapor density, boiling point, and

freezing point methods. Problems in chemical equilibrium and reaction velocity. The determination of the conductivity of electrolytes, fraction ionized, ionic mobility, single and double potentials, and the preparation of standard cells. Three hours of laboratory work a week. One unit; throughout the year. (Weatherby.)

**9b. Physical Chemical Measurements—Advanced.** A laboratory course with supplementary reading. An extension of the work of 9a. Either or both semesters. (Weatherby.)

**10. Chemistry of Agricultural Products.** A critical study of soils, fertilizers, irrigation waters, and agricultural products. Should be accompanied or followed by course 10a. One unit; first semester. (Stabler.)

**10a. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, and similar substances. Prerequisite, course 4. Three or five units; either semester. (Stabler.)

**11. Medical Chemistry.** A laboratory course, including urine analysis, toxicology, and assay of pharmaceutical products. Designed especially for students looking forward to medicine or pharmacy. Open to students who have completed or are taking courses 4 and 7. Three units; either semester. (Stabler.)

**12. Food Analysis.** A laboratory course in the chemistry of meat and meat products, edible fats, dairy products, cereal products, saccharine products, canned vegetables, cocoa, tea, coffee, spices, vinegar, flavoring extracts, fruits and fruit products, fermented and distilled liquors, baking powders, food preservatives, and coloring matter. Open to students who have completed courses 4 and 7. Two units; either semester. (Stabler.)

**13. Industrial Chemistry.** A lecture course covering the chemistry involved in the manufacture of oils, soap, sugar, explosives, and other commercial products. Lectures will be

Prerequisites, courses 2, 3, and 7. One unit; second semester. given by chemists from various manufacturing establishments. (Stabler.)

**13a. Oil and Gas Analysis.** A laboratory course in commercial oil and gas analysis. A special oil laboratory is equipped for handling crude petroleum on a basis commensurate with commercial practice. Two units; second semester. (Stabler.)

**14. Assaying.** This course comprises silver and gold extraction by scorification and crucible methods; the fire assay of copper, lead, and tin; and the extraction of gold from ores by the amalgamation, the chlorination, the cyanide, and the electrolytic processes. Two units; second semester. (Stabler.)

**15. Seminar.** Papers and discussion on assigned topics, with lectures on subjects of general chemical interest. Open to advanced students. One unit; both semesters. (Stabler, Weatherby.)

**16. Research.** Research work, under the direction of the department, may be pursued by candidates for the degree of Master of Arts, in either pure or applied Chemistry. (Stabler, Weatherby.)

**17. Teacher's Course.** A study of certain fundamental principles of chemistry and of the method of their presentation in teaching. One unit; throughout the year. (Weatherby.)

**Fees:** In all laboratory courses except course 14 a deposit of thirteen dollars per semester for each course is required. Of this five dollars per semester, less breakage, is returnable. In course 14 a deposit of ten to thirty dollars is required to cover the cost of material consumed.

**Major Work:** Those majoring in Chemistry are advised to take courses 2, 2a, 3, 3a, 4, 6, 7, 7a, 9, 9a, 10, 13, 15, and at least ten additional units from the special analytical courses.



The minimum requirement is sixteen semester units in addition to courses 2, 2a, 3, and 3a.

**High School Teachers' Recommendation.** 1, 1a, General Inorganic, 2, 2a, 3, 3a, Advanced Inorganic and Qualitative Analysis; 4, Quantitative Analysis; 7, 7a, Organic; 9, 9a, Physical; 17, Teachers' Course; and at least two units from the advanced analytical courses.

## DRAWING

A. W. NYE, C. W. LAWRENCE, Professors  
A. WEATHERHEAD, Instructor

**1. Elementary Mechanical Drawing.** Lettering, geometric problems, projection, development, and intersection. Six hours, two units; first semester. (Weatherhead.)

**2. Advanced Mechanical Drawing.** Isometric projection, tinting, shades and shadows, and machine drawing. Six hours, two units; second semester. (Weatherhead.)

**4. Machine Drawing.** Drawing details, and assemblies of machine parts from sketches made in the laboratories or from blue prints. Designing simple machines. Lectures and drafting. Four hours, two units; first semester. (Weatherhead.)

An examination in orthographic projection will be given to all students entering this course.

**5. Technic of Drawing.** The technical details of drafting in connection with steel construction, topographical mapping, electrical diagrams, curved shading, etc. Four hours, two units; second semester. (Weatherhead.)

**6. Descriptive Geometry and Stereotomy.** Advanced study of the representation of lines, surface and solids, shades and shadows, from a mathematical standpoint; linear perspective and stereotomy. Four hours, two units; throughout the year. (Weatherhead.)

Text, Descriptive Geometry. Moyer.



**7. Machine Design.** Advanced course in mechanical and electrical design, detailing, working drawings of complicated machine details, study of standard commercial machine parts, shop practice, strength of parts, use of tables, formulae, slide rule, gearing, estimating, specifications, structural iron and steel. Three units; second semester. (Nye.)

**8. Graphical Statics.** The graphical determination of stresses in engineering structures. See Civil Engineering 15. Four hours, two units; first semester. (Lawrence.)

**9. Structural Design.** Complete designs for steel bridges, roofs, and other structures. See Civil Engineering 18. Seven hours, three units; throughout the year. (Lawrence.)

## ECONOMICS AND SOCIOLOGY

ROCKWELL D. HUNT and EMORY S. BOGARDUS, Professors;  
OLIVER J. MARSTON, Associate in Economics; GEORGE F.  
KENNGOTT, Associate in Sociology; KENNETH WALLACE, Lec-  
turer.

HAROLD J. STONIER, CLOYD H. MARVIN and LOIS A. ELY,  
Assistants

### Economics

#### LOWER DIVISION COURSES

**1. Principles of Economics.** A comprehensive introduction to economic studies, based upon a recent text, lectures, assigned readings, and student exercises. The elements of economic life, and the principles and problems of Production, Distribution, and Consumption, with particular reference to American conditions. Three units; throughout the year. (Hunt.)

**Note**—Economics 1 is recommended to students taking the six hours requirement (History or Economics) in this department. It is in general prerequisite to all other courses in Economics.

**2. Public Finance.** A study of budgetary science, the principles and practice of taxation, public expenditures, and financial administration. Much attention is given to federal, state, and local taxation in the United States. Three units; second semester. (Marston.)

**3. Money, Credit, and Banking.** The origin and evolution of money, with special attention to the problems of metallic and paper money; the history and theory of banking, with examination of leading systems and special problems. Three units; first semester. (Marston.)

**4. Economic Geography.** A survey of the history and present status of industry and commerce in the principal countries; study of natural advantages in the world market, and of national policies in development of resources, with special attention to the United States. Two units; second semester. (Bailey.)

**5. Transportation and Communication.** The theory and history of transportation; the development of the railroad, its organization, management, and consolidation. Ocean and inland waterways. Problems of rebates, public regulation, etc. Postal service and express companies. Two units; first semester. (Marston.)

#### UPPER DIVISION AND GRADUATE COURSES

**6. Labor Problems.** The important labor problems of the day, with special reference to American conditions. The history and problems of labor organizations, strikes and lock-outs, industrial arbitration, profit-sharing, woman and child labor, etc. Three units; second semester. (Hunt.)

**7. History of Economic Thought.** The development of economic thought from classical antiquity, with discussions of the different schools of economics. Extensive readings from numerous writers, with reports by the students. Two units; throughout the year. (Not given during 1915-16.)

**8. Recent Economic Thought.** A comparative study of the theories of leading contemporaneous economists and the tendencies of the present day, with special reference to the problems of value and the distribution of wealth. Two units; throughout the year. (Hunt.)

**9. Municipal Problems.** The rise and growth of the modern city. Chief emphasis is placed on American municipal government. Economic, administrative, and social problems are considered. The regular work of the class is supplemented by a series of special lectures by leading practical experts. Three units; first semester. (Hunt.)

**10. Fiscal and Industrial History of America.** A comprehensive survey of American economic development and of national legislation in the fields of currency, finance, and the tariff, studied in relation to the evolution of commerce and industry. In addition to the use of texts and extended readings, students will be directed to a limited number of documentary sources. Two units; second semester. (Marston.)

**10a. Commercial Organization.** After giving attention to the leading extractive industries, such as agriculture, mining and forestry, special studies are made in certain industries, each student being required to study intensively some one field and present a report. Special problems include population, marketing, business organization and industrial finance. Two units; first semester. (Wallace.)

**10b. Business Administration.** An examination of the principles underlying the modern organization of business, internal, as applied to the production end, and external, as applied to the distribution end of business. Methods of business administration, with application of the principles of scientific management to institutions outside of ordinary business, as city government, schools, churches, etc. Two units; second semester. (Wallace.)

**11. Socialism.** It is the aim of this course, after giving attention to the earlier history of communistic and socialistic theories and movements, to examine the underlying causes of the modern socialist movement, study various schools of socialistic thought, and present a critical estimate of socialism as a philosophy of economic evolution and as a program of social reform. Two units; first semester. (Hunt.)

**12. The Liquor Problem.** After a brief consideration of its physiological and psycho-physical aspects, attention will be devoted to the economic aspects and social phases of the drink problem, with special references to American conditions. Discussion of pathological conditions connected with the drink habit will be followed by an examination of leading proposals for control or elimination. One unit; throughout the year. (Hunt.)

**13. Seminar.** The Seminar, which was first organized in 1910, is designed to meet the needs of graduate students of the department; for the present it may include also a limited number of senior undergraduates. In addition to the leading reports, which are based upon original investigation, attention is given to the reviewing of recent books and periodical literature and to topics of contemporaneous interest. Two units; throughout the year. (Hunt.)

## Sociology

### LOWER DIVISION COURSES

**1. Introduction to Sociology.** A comprehensive study of social progress, with frequent application to concrete conditions. The year's work closes with a summary of social progress. The course is intended to serve as an introduction not only to other courses in Sociology but also to the other social sciences. Two units; throughout the year. (Bogardus.)

### UPPER DIVISION AND GRADUATE COURSES

**2. Principles of Sociology.** An introductory course for upper division and graduate students. A fundamental course presenting an analytical study of social life and the forces of its orderly development, intended to lay substantial foundations for more advanced work. A good knowledge of history and an acquaintance with biology and psychology are desirable. Three units; first semester. (Bogardus.)

**3. Immigration.** The course begins with a study of the general causes of migration in the world's history. It considers the European backgrounds of immigration to the



United States, and the problems which the immigrant faces when he attempts to adjust himself to a new and strange environment. Attention is given to the history of immigration to the United States, with special emphasis on present-day immigration problems. The course closes with a study of the foreign races in Southern California, and of the problems likely to arise. Three units; first semester. (Bogardus.)

**4. Charities.** Begins with studies in the nature, extent, and causes of poverty. Examines the organization of charity and the supervision of public and private agencies, including social settlements, etc. The various socially defeated classes are considered. Remedial measures are treated and emphasis is placed upon methods of prevention. The class visits charitable institutions in Los Angeles and the vicinity. Two units; second semester. (Kenngott.)

**5. Criminology.** A study of crime from sociological and psychological points of view. Some of the topics considered are juvenile self-government, contributory negligence, the juvenile court, the George Junior Republic idea, adult probation, the history of prison systems, prison labor, present tendencies in prison reform. Emphasis is laid upon methods for the prevention of crime. The class visits reformatory institutions in Los Angeles county. Two units; second semester. (Bogardus.)

**6. Social Psychology.** Based on assigned readings in Ross, McDougall, Baldwin, Cooley, and others. The social instincts, the development of the self, the social nature of the self. Imitation, custom imitation, fashion imitation. Suggestibility, the crowd, the mob, formation of permanent groups, group conflicts, group leadership, group consciousness. The formation of public opinion, its fundamental part in maintaining group stability and in securing group advancement. Two units; first semester. (Bogardus.)

**7. History of Sociology.** A history of social thought since earliest times. A comparative study of the early social writers, and of the leading sociologists of the nineteenth century



and of the present day. Extensive library work and frequent reports are among the requirements. Two units; second semester. (Bogardus.)

**8. Seminar in Sociology.** An advanced course, primarily for graduates, in which the student makes practical application of his previous sociological studies. After inquiry into the historical as well as the present status of some leading social problem, both from European and American points of view, the student investigates the concrete local phases of the same question and presents results. Considerable time is given to field work and stress is placed upon original research. Two units; throughout the year. (Bogardus.)

**9. Social Ethics 1 and 2.** During the first semester ethical theories are examined in relation to the social questions and foundations are laid for intensive study of American social conditions. The second semester's work has more particular reference to practical applications. Social and industrial life is subject to the criteria set by a societary point of view. Two units; throughout the year. (Kenngott.)

**10. Social Insurance.** A survey of contemporary social problems with special reference to the principles and methods of social amelioration, followed by a comparative study of certain preventive and constructive measures of leading countries. An examination of both the theory and experience in provision for accident, invalidity, old age and other forms of social insurance. Two units; first semester. (Kenngott.)

**11. Seminar in the Relation of Religion and Social Questions.** Designed to meet the needs of a limited number of religious and social workers and other graduates showing adequate preparation for advanced work in applied sociology. Candidates should make application to the director or to the department. Two units; throughout the year. (Bogardus.)

**12. Methods in Social Surveys.** A social survey of a definite sociological problem in Los Angeles is undertaken each year. In 1914-15 the survey covers housing conditions in about twenty city blocks in a congested section of the city.

The work may serve to open the way to permanent positions in social service work. The course is open primarily to graduates. Two units; both semesters. (Bogardus.)

**Major Work in Economics and Sociology:** Thirty semester units.

**High School Teacher's Recommendation:** 1, Principles; 2, Public Finance; 3, Money and Banking; 4, Economic Geography, or 5, Transportation; 6, Labor Problems; 7, History of Economic Thought, or 8, Recent Economic Thought; 9, Municipal Problems; Seminar. Sociology: 1, Introduction, or 2, Principles; and at least two other approved courses.

## EDUCATION

THOMAS B. STOWELL, Professor

HOWARD L. LUNT, Associate Professor

ELIZABETH YODER, Assistant Professor

JEREMIAH B. LILLARD and ELSA H. HORSTMANN, Lecturers

1 and 2. **Foundational Psychology.** See Philosophy 1 and 2. Six hours; two semesters.

3. **Principles of Education** (including General Method). A study of Psychological and Educational Principles which underlie the work of teaching. It considers primarily the psychology of the acts of teaching; secondly, the nature of the subject-matter to be learned; thirdly, how the mind of the teacher adjusts the mind of the learner to the task set, and thereby constructs the art of teaching. (Stowell.)

A limited number of psychological experiments illustrative of the matter under consideration is followed by discussions of their respective educative values. Lectures, discussions, collateral readings, papers. Textbook—Horne's "Psychological Principles of Education." Prerequisite, courses 1 and 2. Open to upper division and to graduate students. Three units; first semester.

4. **Principles of Secondary Education.** (3 continued.) Its foundational principles; the social and the individual bases.

The organization of the school curriculum; schemes advocated: typical recitations, programs, etc. Lectures, readings, reports. Three units; second semester. (Stowell.)

**5. History of Education: Ancient and Mediaeval.** Beginning with the earliest periods and extending to the period of the Reformation. A study of the development of educational ideals and systems with special reference to the agencies that have been operative in their evolution. Lectures, collateral readings, papers. Monroe's "Text-Book in the History of Education." Open to upper division and to graduate students. Three units; first semester. (Stowell.)

**6. History of Education: Modern** (5 continued). From the Reformation to the present, with a critical study of educational classics, especially the contributions of Comenius, Locke, Rousseau, Basedow, Pestalozzi, Herbart, Froebel, Spencer, and contemporary educators. Three units; second semester. (Stowell.)

**7. Aesthetics** (See Philosophy 8.) This course considers the psychology of Aesthetics; the principles controlling the expression of beauty and their application to the Fine Arts; and a brief history of the Arts with special reference to their importance and effectiveness as educating agencies. Lectures, readings, observations, reports. Two units; first semester. (Stowell.)

**8. School Organization, Administration, Supervision, and Management.** A study of the problems of school supervision. It considers the problems of the organization and administration of public schools. Among the topics treated are the following: Lectures, discussions, readings, observations, reports. Textbook—Arnold's "School and Class Management." Open to upper division and to graduate students. Two units; second semester. (Stowell, Lillard.)

**9. Education of Exceptional Children.** A historical and critical survey of the methods employed in the education of the blind; of the deaf and dumb; of those defective in speech;

of the feeble-minded; of abnormal and backward children; of the ethically defective; of epileptics; the care of neglected and dependent children. This course is articulated with Sociology 2, q.v. Observations, reports, readings, discussions. Open to upper division and to graduate students. One unit; first semester. (Lunt.)

**10. Philosophy of Education.** An advanced course in educational theory. It investigates the nature of the psychic activities which make education possible and desirable; the essential nature of the educating process and its limitations; the actual development of this process as seen in the various civilizations. Lectures, discussions, critical study of educational sources. Textbook—Rosenkranz's "Philosophy of Education." Prerequisite, Courses 1, 2, 3, 4, 5, 6. For graduate students. Three units; first semester. (Stowell.)

**11. Philosophy of Education.** An advanced course in educational theory. The possibility of education, its pre-suppositions, its place in human experience, its end; the science, its basis, its certitude; the philosophy of education, the sources of its materials; the meaning of institutions, their contributions to the philosophy of education; a liberal education, its essence, its efficiency; culture, its characteristics, its relation to the curriculum; the tests of college efficiency. Lectures, discussions, readings, papers. Primarily for graduate students. Three units; second semester. (Stowell.)

**12. Interpretation and Expression.** Lectures on methods in the interpretation of literature; the psychology of expression; oral practice of selections from masterpieces; the technique of voice. Open to graduates who are candidates for the teacher's certificate. One unit; first semester. (Yoder.)

**13. Interpretation and Expression.** Continuation of 12. One unit; second semester. (Yoder.)

**14. Principles of Sociology.** See Sociology 2. Three units; first semester. (Bogardus.)



**19. Practice in Teaching.** The University High School, located on the University Campus, furnishes rare facilities for observation and for actual experience in handling and giving instruction to classes in Secondary Education. Five hours; one semester.

**20. Immigration.** See Sociology 3. Three units; second semester. (Bogardus.)

**21. Religious Education.** See English Bible 7. Two units; second semester. (Montgomery.)

**22. Current Problems in Education.** A study of existing systems of Education with special reference to the underlying industrial and social forces that have determined their development. This course will discuss vocational education and its relation to liberal education; continuation schools; special schools; vocational guidance, etc. It will consist of lectures, discussions, and reports upon the various phases of modern educational theory and practice, with a detailed study of typical schools. Summer session; two units. (Lillard.)

**23. Secondary Education.** This course considers the origin, growth, organization, administration, supervision, and management of the American high school; the modern conception of its relation to the elementary school, to higher institutions of learning, and to the community; formal discipline, adolescence, moral education, vocational education, social organizations, and the curriculum.

It is designed primarily to meet the needs of candidates for the high school certificate. Two units. (Lillard.)

**For Special Courses in Education,** see the several departments, as follows:

Teachers' Course in English, see English 80.

Teachers' Course in French, see French 5.

Teachers' Course in German, see German 11.

Teachers' Course in History, see History 17.

Teachers' Course in Latin, see Latin 13.



Teachers' Course in Mathematics, see Mathematics 10.

Teachers' Course in Spanish, see Spanish 14.

Teachers' Course in Botany, see Botany 6.

Teachers' Course in Physics, see Physics.

Teachers' Course in Chemistry, see Chemistry.

## ENGINEERING COURSES ELECTIVE IN ARTS

The following courses in engineering are open to students in the College of Liberal Arts, but not more than a total of 18 units may be counted toward the degree of Bachelor of Arts. These courses may also be offered by engineering students seeking credit in the department of Liberal Arts, but in such transfer of credits not more than 18 units will be accepted for any one semester's work.

	Units
Drawing (4 and 5).....	4
Descriptive Geometry (Drawing 6).....	4
Surveying (C. E. 1 and 2).....	6
Analytical Mechanics (C.E. 7).....	5
Sanitary Engineering (C.E. 12).....	2
Materials of Construction (C.E. 13).....	3
Dynamo Machinery (E.E. 1 ab).....	10
Dynamo Laboratory (E.E. 2).....	2
Steam Engineering (E.E. 4 and 5).....	4
Alternating Currents (E.E. 3a).....	5

## ENGLISH LANGUAGE AND LITERATURE

ALLISON GAW and PAUL S. WOOD, Professors

BENJAMIN F. STELTER and HOWARD L. LUNT, Associate Professors

JAMES MAIN DIXON, Lecturer

BRUCE O. BLIVEN, Instructor in Journalism

M. PAULINE SCOTT, FRANCES T. NEILL, DOROTHY DAVIS,

Instructors in Composition and Literature

IDA B. McADOW, Assistant

1. **Introductory Course.** Practice in composition, based upon a study of representative works in English literature. Required of all candidates for the bachelor's degree. Three units; throughout the year. (Gaw, Wood, Stelter, Scott, Neill, Davis.)

1b. Training in spelling and punctuation: for students failing to pass an examination in those subjects. No credit is given for 1b, but it must be passed before a student receives credit for English 1. One hour; each semester.

3. **Advanced Composition.** Narrative and descriptive writing; the short-story. Prerequisite, a high grade in English 1. Two units; first semester. (Wood.)

6. **The Laws of Editing.** The growth of the profession of Editor; the rise, development, types of periodical literature; the editing of a classic; book reviewing. Not offered, 1914-1915. Two units; first semester. (Dixon.)

8. **Journalism.** The rise, growth, and present importance of the newspaper; its organization and operation; the collecting, writing, and editing of news; newspaper correspondence, feature and special articles, editorials and paragraphs; writing for the weekly and monthly press; meeting magazine requirements; study of the literary market. Two units; throughout the year. (Bliven.)

9. **Advertising.** A consideration of the theory and practice of business publicity. The economic theory of advertising; preparing a campaign; checking and testing copy; newspaper and magazine advertising, booklets, circulars, form-letters, street-car cards, and bill-boards; the duties of an advertising solicitor or manager; the advertising agency; the mechanics of advertising—type, paper, layouts. Two units; throughout the year. (Bliven.)

11. **The History of the English Language.** An introduction to general linguistic problems. Two units; second semester. (Gaw.)

12a. **Old English.** A study of the grammar and phonology of West Saxon English prior to the Norman Conquest. Required of all English majors. Three units; throughout the year. (Gaw.)

**12b. Historical English Phonology and Grammar.** A condensed treatment of the material of course 12a such as, when preceded by course 14, will completely satisfy the departmental requirement in Old English. Offered only for the benefit of students who find it impossible to attend course 12a. Two units a semester; throughout the year. (Gaw.)

**13. Beowulf.** A reading of selected passages, with critical comment. The course is primarily literary, not philological. Prerequisite, English 12. Two units; second semester. (Gaw.)

**14. Old English Prose.** The Gospels and Psalms in West Saxon. Training in the etymology and syntax. Offered only for the benefit of students who find it impossible to attend course 12a, and intended to precede course 12b, q. v. One unit; first semester. (Dixon.)

**15. Chaucer.** Survey of Chaucer's life and times; readings principally in the "Canterbury Tales" and "Troilus and Cressida." Two units; second semester. (Stelter.)

**16. Early Middle English Literature.** A study of typical literary forms between 1100 and 1350. Primarily for graduates. Two units; second semester. (Gaw.)

**17a. Northern Middle English.** The "Kingis Quair"; the poems of Henryson and Dunbar. Three units; second semester. (Dixon.)

**17b. Burns** and modern Scottish vernacular literature. Two units; second semester. (Dixon.)

**30. General History of English Literature.** Required of all students intending to do major work in English, and in general prerequisite to courses in English literature above Sophomore grade. Two units; throughout the year. (Stelter.)

**30a. Masterpieces of English Literature.** An introduction to the study of literature. Two units; throughout the year. (Wood.)

**30b. Retrospect of English Literature.** An examination of the salient historical facts from the point of view of the graduate student, with intensive reading and bibliography. For graduates only. Two units; second semester. (Gaw.)

**31. The Early English Period.** A study of English literature from its origins to 1066. Prerequisite, English 12. Three units; second semester. (Gaw.)

**32a. Elizabethan Non-Dramatic Literature.** 1557-1660. A study of the principal authors and types of non-dramatic literature of the period. For seniors and graduates. Two units; first semester. (Stelter.)

**32c. The Period of Milton.** Milton's poetry and most important prose. Selections from the Church poets, Cavaliers, and prose writers of the period. Three units; second semester. (Stelter.)

**33. The Classical Period.** 1660-1760. The rise, culmination, and decline of the chief manifestation of the classical spirit in English literature. Three units; second semester. (Wood.)

**34. The Romantic Period.** 1760-1832. Chief attention is given to Wordsworth, Coleridge, Byron, Shelley, and Keats. Three units; first semester. (Stelter.)

**35. The Victorian Period.** 1832-1892. The prose and poetry of the last two-thirds of the nineteenth century. Three units; first semester. (Wood.)

**36. American Literature.** A survey from the beginnings in the colonial period to the present day. Three units; second semester. (Wood.)

**39. Contemporary British and American Poets.** A consideration of the chief writers of verse in the English language since the death of Tennyson. Two units; second semester. (Wood.)

**43. The Early Popular Drama.** An intensive study of the scriptural, allegorical, and comedy elements in the drama preceding the Shakespearean period. Primarily for graduates. Prerequisites for undergraduates, 15a and 52a. Two units; second semester. (Gaw.)



44. **The Elizabethan Drama.** The development of the English drama and stage from the beginnings to the close of the theatres in 1642. Two units; second semester. (Gaw.)

45. **The Modern Drama.** The history of the English drama from 1660 to the present day. Three units. (Gaw.)

47. **The English Sonnet.** Historical treatment of the sonnet and the principles of versification. Two units; second semester. (Dixon.)

52. **Shakespeare.** Analytical study of the series of Shakespeare's plays in chronological order, in the light of English dramatic history and the contemporary social conditions. Two units; first semester. (Gaw.)

52b. **Shakespeare's Historical Plays.** (For descriptions see Department of History, courses 2 and 3.) Two units; throughout the year. (Dixon.)

52c. **Shakespearean Tragedy.** A detailed study of four of Shakespeare's tragedies. Two units; first semester. (Stelter.)

62. **Scott as an Historical Novelist.** Special attention to "Old Mortality," "Rob Roy," "Waverley," and "Guy Mannering." Two units; second semester. (Dixon.)

64. **Wordsworth and Shelley.** Two units; first semester. (Stelter.)

65a. **Tennyson.** As a lyrist and interpreter of his age, with special attention to "In Memoriam." Two units; second semester. (Dixon.)

65b. **Tennyson's Narrative Verse.** "The Princess," "The Idylls of the King," and "Maud," with special attention to the art of modern narrative and to the relation of thought and verse-form. Two units; first semester. (Gaw.)

66. **Browning.** A study of the art and teaching of Robert Browning. Two units; second semester. (Wood.)

67. **Matthew Arnold.** The exponent of Oxford ideals; humanist, elegiast, Neo-Hellenist. Two units; first semester. (Dixon.)



**68a. Ruskin.** His ethico-esthetic teaching and his economic teaching. His nearness to the philosophy of *Idées-forces* as expounded by Guyau. Two units; first semester. (Dixon.)

**68b. Carlyle.** His influence on his contemporaries and on nineteenth century ideals, with special attention to the "Sartor Resartus." Two units; second semester. (Dixon.)

**70. History of Greek Literature.** Lectures, together with reports and discussions based upon the work of English translators. Two units; throughout the year. (Owen.)

**73. History of the Novel.** The development of the European novel with special attention to its production in England. Not offered, 1914-1915. Two units; throughout the year. (Wood.)

**73a. Studies in the Modern Novel.** An analytical study of representative English, French, and Russian novels. Two units; throughout the year. (Wood.)

**74. Poetic Form.** A study of the aesthetics and the historical development of English verse. Primarily for graduates. Two units; second semester. (Gaw.)

**75. Principles of Literary Criticism.** A comprehensive study of the fundamentals of belles-lettres, with revision of theories and discussion. Two units; first semester. (Dixon.)

**76. Hymnology.** A study of hymns, ancient and modern, with critical discussion. Two units; second semester. (Dixon.)

**77. Theories of Poetry.** A study of the chief theories of poetry and the types of poetic literature, with illustrations drawn mainly from the English poets. Two units; throughout the year. (Stelter.)

**80. The Teaching of English.** A study of problems, methods, materials, and bibliography. Required of all candidates for the High School Teacher's Certificate offering English as

major or minor. Graduate course, but not credited toward the degree of Master of Arts. Two units; first semester. (Gaw.)

**81. Interpretation and Expression.** For description of the course see **Education 12** and **13**. Required of all candidates for the High School Teacher's Certificate offering English as a major. Such candidates are advised to satisfy this requirement in their senior year. Open only to seniors preparing for teaching or to graduate students. One unit; throughout the year. (Yoder.)

**90. The English Seminar.** For graduates. One unit; throughout the year.

**92. English Translations of the Classics.** Rapid reading in the best translations, with emphasis upon Greek masterpieces. Translations from the Latin are chosen for the bearing of the original works upon English literature. Selections from Dante. Two units; throughout the year. (Stelter.)

NOTE.—For other courses of interest to students electing English as major subject, see the Department of Oriental Studies and General Literature.

**Advisers.**—For advice concerning the various details of their work graduate students electing English as major subject will confer with the head of the department. Each undergraduate English major student at the beginning of the sophomore year will choose a permanent adviser from among the three chief members of the English faculty.

**Undergraduate Major Work.**—Thirty semester units. In major work in English all candidates must include courses 12a (or 14 and 12b) and 30.

Each candidate for the department's recommendation for the bachelor's degree is expected to be able to interpret orally, with ease and effectiveness, moderately difficult passages of modern English prose and verse. To this end students doing major work in English should early in the course avail them-

selves of the privilege of electing courses in the College of Oratory. This statement applies with especial force to prospective teachers.

**Undergraduate students who contemplate the teaching of English will find it distinctly to their advantage to notify the department of that fact at the beginning of the senior year.**

**The High School Teacher's Recommendation.**—An undergraduate major English course, followed by a minimum of eight graduate units in the English department. The course as a whole must include courses 11, 12a (or 14 and 12b), 30, a period course (see courses 31 to 35), 80, and 81. In addition the candidate must creditably pass the "English final examinations for graduates."

**The Degree of Master of Arts.**—A satisfactory undergraduate major English course, followed by a graduate course organized as prescribed in the general regulations for the degree of Master of Arts (which see) and involving compliance with the requirements concerning the "English final examinations for graduates" as indicated below. Candidates for the degree of Master of Arts in English are also required to offer a reading knowledge of Latin, German, or French.

**The English Final Examinations for Graduates:** In addition to the regular course examinations there will be required of all English major candidates for the degree of Master of Arts or for the High School Teacher's Recommendation a more comprehensive test of their fitness for the honors in question. This will require of the candidate evidence of a scholarly attitude of mind and an habitual use of scholarly methods no less than a firm grasp of the subject-matter involved. The equipments required are:

1. Familiarity, obtained at first hand, with the chief masterpieces of English literature, with the history of its development and with the methods of historical study.
2. Satisfactory special knowledge of one of the main literary periods or movements or types.

3. The ability to apply to a literary work of art of any of the well recognized types, the standard criteria, constructive, metrical, and stylistic.

4. A scholarly acquaintance with the methods of linguistic study and with the history of the development of the English language through its three main periods.

5. Skill in organizing and presenting thought orally and in writing.

The above examinations are conducted once every semester and must be taken at some time during the academic year at the end of which the degree or certificate in question is to be granted. Candidates for the Teacher's Certificate must pass with "recommended grades" in each of the five divisions specified. Candidates for the degree of Master of Arts must show high merit in each of the five divisions. In lieu of divisions 2 and 4 the candidate may offer final examinations in advanced courses covering material of the nature described, which examinations shall have been taken at this University within the same academic year.

### **Journalism and Advertising**

The subjects that chiefly interest those contemplating a career in Journalism are taught in the courses listed below. Such students may register as students in Journalism, an option in the Department of English. For candidates for a degree a major course aiming toward this end must be organized with due regard for the general college requirements and for the prerequisites of each course. Special students are admitted to such courses as they may be prepared to follow with profit. For the descriptions of the courses see under the various departments referred to.

**English.** Journalism (English 8); Composition, elementary and advanced, with practice in the Short Story (English 1, 3); Literary Criticism (English 75, 77); Fiction (English 73, 73a); the Drama (English 44, 46, 52, 52c); the Laws of Editing (English 6); Advertising (English 9); History of English Literature (English 30-39, etc.); Debating (Oratory 3).

**Economics.** Principles of Economics (Economics 1); Finance and Banking (Economics 2, 3); Economic Geography and Transportation (Economics 4, 5); Labor Problems (Economics 6); Municipal Problems (Economics 9); Fiscal and Industrial History of America (Economics 10); Socialism (Economics 11).

**Sociology.** Principles of Sociology (Sociology 1, 2); Immigration (Sociology 3, Education 20); Charities, Criminology, and Social Problems (Sociology 4, 5, 8).

**History.** Colonial and National History of America (History 4, 11); History of England (History 1); History of Modern Europe (History 10, 11); History of the Pacific Slope (History 15).

**Governmental and International Relations.** Constitutional History of England (History 14); The American Government (History 16); Political Science (Political Science 1); International Law (Political Science 2); International Relations in the Pacific (Oriental Studies 14); Japanese History, Civilization, and Economics (Oriental Studies 1, 2); Chinese History, Civilization, and Economics (Oriental Studies 3, 4); Philippine History and Civilization (Oriental Studies 9).

**Auxiliary Studies.** Histories of Foreign Literatures (see under various languages); Philosophy and Psychology; Education, Its Principles and Administration.

## ENGLISH BIBLE

JOHN G. HILL, Professor

LOWER DIVISION COURSES

1. **The Pentateuch and Other Historical Books of the Old Testament.** The origin, history, tradition, cosmology, morals, laws, government, and religious philosophy of the Hebrews from Abraham to Solomon will be considered. The questions of date, authorship, purpose, plan, style of literary composition and ruling ideas of each book will be studied. Two units; first semester. (Hill.)



**2. The Prophetic and Chronicle Books of the Old Testament.** This course will survey the varied and swiftly changing periods of Hebrew history from the close of the United Kingdom to the end of Old Testament times. The greatest stress will be laid upon the study of the prophets; their unique place and power, their relation to state and Church, their distinctive messages and permanent contribution to the history of religion. Two units; second semester. (Hill.)

**3. The Apostolic Age of the New Testament.** This course is a careful survey of the Apostolic Church of the first century, its origin, its strange success, its painful conflicts with Judaism, its brutal persecutions by Paganism, and its new life in the dying Empire; also a comparison of the religious ideas of Paul, Peter, James, and John, and of their mode of inspiration. Two units; first semester. (Hill.)

**4. The Gospel History and Literature of the New Testament.** A study of the life, teachings, work, and significance of Jesus Christ as portrayed in the Four Gospels and as seen against the historic background of modern scholarship. Special emphasis is laid upon the living authority of Jesus and the ruling ideas of the Sermon on the Mount in sharp contrast to Jewish and Pagan religious ideas. Two units; second semester. (Hill.)

#### UPPER DIVISION COURSES

**5. Israel's Wisdom and Poetic Literature.** An advanced course in the wisdom, literature and poetry of Genesis, Deuteronomy, Proverbs, Job, Psalms, etc., from the literary and ethical points of view. Two units; first semester. (Hill.)

**6. The Teachings of Jesus in the Gospels.** A critical study of Jesus' utterances as to his authority, ruling ideas, ethical claims, social program, growing self-consciousness, and views on sin, salvation, death, the future, etc. Two units; second semester. (Hill.)

**7. Religious Education.** A course designed to fit the student for teaching Bible classes in Sunday Schools, teacher-training courses, etc. The teacher, his work, qualifications

and preparation; the student, his physical, mental, and moral nature; the lesson; the teacher's approach to the student; etc. One unit; throughout the year. (Montgomery.)

**8. Hebrew Doctrines, Institutions, Typology.** This course sets forth the progressive development of the elementary teachings of the Old Testament as to God, man, sin, salvation, the future life, the kingdom of God; and includes a study of rites, types, institutions, and codes. Offered alternate years with course 5. Two units; first semester. (Hill.)

**9. Christian Doctrines, Institutions, Typology.** A series of inductive studies in the New Testament records (Gospels and Epistles) to determine the meaning and content of doctrines, institutions, and types found therein. Offered alternate years with course 6. Two units; second semester. (Hill.)

**10. The Early English Bible.** The Gospels and Psalms in West Saxon. For description see announcement of the College of Theology. Two units; throughout the year. (Dixon.)

**11. Bible and Hymn Reading.** For description see announcement of the College of Oratory, course 11. Two units; second semester. (Nattkemper.)

**12. New Testament Exegesis.** For description see announcement of the College of Theology. Two hours; throughout the year. (Healy.)

**Major work** in religious education may be arranged for.

## FRENCH

EDGAR VON FINGERLIN and LAWRENCE M. RIDDLE, Professors  
EVA F. DE KERPEZDRON and MARTIN KNEELAND, Instructors

### LOWER DIVISION COURSES

**1. Elementary French.** Grammar, elements of phonetics, reading of French texts. Outlines of French political history of the nineteenth century. Five units; throughout the year. (Riddle, Kneeland.)

**2. Modern French.** Selections from Chateaubriand, Hugo, Dumas, Sand, Balzac, Daudet, Zola, Flaubert. Outlines of French literature of the nineteenth century. Composition. Three units; throughout the year. (Riddle.)

UPPER DIVISION COURSES

**6. French Literature of the Seventeenth Century.** A general survey with special attention to Corneille, Racine, and Molière. Offered 1915-1916. Two units; throughout the year. (Riddle.)

**7. French Literature of the Eighteenth Century.** A general survey with special attention to Montesquieu, Voltaire, and Rousseau. Offered 1916-1917. Two units; throughout the year. (Riddle.)

**8. French Lyric Poetry of the Romantic School.** Lamartine and Hugo. Interpretation of romantic poetry according to such methods as those suggested by Roustan, "Précis d'explication française." Rudler, "L'Explication française." One unit; second semester. (Riddle.)

**9. Advanced French Composition.** Prerequisite, course 2. One unit; throughout the year. (von Fingerlin.)

**10. French Conversation.** Students are divided into sections of not more than ten each. Each section meets twice a week. Throughout the year, one unit a semester. (de Kerpezdron.)

**11. Teachers' Course.** The methods of teaching, and the finer points of the language. While primarily intended for teachers, the course is open also to those who have finished course 5 or course 6. Two units; second semester. (von Fingerlin.)

**21. French Seminar.** Studies in French syntax. Two units; throughout the year. (Riddle.)

**22. French Literature of the Renaissance.** Special attention is given to Rabelais, Ronsard, and Montaigne. Offered 1916-1917. Two units; throughout the year. (Riddle.)

**23. French Drama of the Seventeenth Century.** First semester: Corneille and Racine; second semester, Molière. Offered 1915-1916. Two units; throughout the year. (Riddle.)

**24. French Phonetics.** The principles of phonetics in their application to French pronunciation. Passy-Rambeau. "Chrestomathie phonétique." Two units; throughout the year. (von Fingerlin.)

**25. Reading of Old French Texts.** "La Chanson de Roland," "Aucassin et Nicolette," and selections from Bartsch-Wiese, "Chrestomathie de l'ancien française." One unit; throughout the year. (Riddle.)

**26. French Phonology and Morphology.** Three units; throughout the year. (von Fingerlin.)

**Major Work:** Thirty units, including courses 2, 6, 7, 9, 10, and 11. The student must also pass an examination in the history of French literature.

**Minor Work:** Twenty units, including courses 2 and 9.

**High School Teacher's Recommendation:** The requirements for major work, and a minimum of seven graduate units, including one semester of the seminar. The candidate must also pass an oral and written examination in French syntax and French pronunciation.

## GEOLOGY

GILBERT ELLIS BAILEY, Professor

CORA B. FREEMAN, FRED W. KELLY, GERALD A. CRAIG,  
Laboratory Assistants

### LOWER DIVISION COURSES

**1. Physiography.** A study of the surface features of the earth and their relations to human life and industries. Lectures and recitations. Two units; one semester.

The course deals with subjects which are intermediate between Geology, on the one hand, and History, Sociology, Political Economy, and Biology on the other.

**2. Mineralogy.** A study of the properties, uses, and methods of determination of the most important minerals, ores, and gems. Laboratory, recitations, and lectures. Prerequisite, Chemistry 2 or its equivalent. Two or three units; throughout the year.

**3. Ores and Metals.** Course 2 in the Department of Chemistry.

#### UPPER DIVISION COURSES

**4. Commercial and Economic Geography.** A study of the effects of soil, climate, and geographical situation in determining the character of national industries and of international trade, commercial routes, seaports, exports and imports. An analysis of the fundamental natural factors necessary for man's economic progress. Prerequisite, Geology I or its equivalent. Two units; second semester.

**5. General Geology.** Lectures, laboratory and field work, with special attention to the geology of the Pacific Coast region. Chamberlain and Salisbury's "Advanced Course in Geology;" Hay's "Handbook for Field Geologists"; Spurr's "Geology Applied to Mining." Shimer's "Introduction to the Study of Fossils." Two units; both semesters.

**6. Agricultural Geology.** Lectures on the origin, composition, classification and naming of soils; control of aeration and moisture condition; physical analysis of soils. Bailey's "California Soils." Open to all classes. Two units; first semester.

**7. Agronomy.** Lectures on methods of cultivation of the different types of soils; effect of tillage; soil hygiene; adaptation to crops; fertility of soils; fertilizers. Two units; second semester.



**GERMAN**

MARGARET GRAHAM BORTHWICK, Professor  
BERTHA J. JACOBY-KIENLE, Associate Professor  
MYRTLE EMILY BILES, Assistant Professor

**LOWER DIVISION COURSES**

**1. Elementary German.** Pronunciation, reading, and grammar, with practice in speaking and writing German. This course is intended for students who enter without German. It includes the essentials of German grammar, with various practical exercises in dictation, composition, translation at hearing, and oral and written reproduction. During the second semester some interesting short stories and characteristic poems are studied. Five units; throughout the year. (Kienle.)

**Note.**—German 1 cannot be credited toward the required number of units for either major or minor work in German.

**2. Modern German.** Modern narrative and dramatic prose, selected poems, and one drama of Schiller or Lessing. Grammar continued, with written and oral exercises. Composition once a week. Collateral readings. For students who have had course 1, or two years of high school German. Three units; throughout the year. (Borthwick, Biles.)

**2a. German Conversation.** This course is designed to make the student familiar with common expressions that occur in every day life, with verb sequences on visiting, walking, writing, etc. Conducted entirely in German. For those deficient in the oral use of the language. Prerequisite, German 2. Two units. Hours to be arranged. (Kienle.)

**3. Scientific and Journalistic German.** Rapid reading of scientific prose and leading articles in German newspapers as found in Prehn's "Journalistic German" and current German periodicals. Oral exercises. For students specializing in science. Open to those who have had course 2, or its equivalent. Two units; throughout the year. (Biles.)

## UPPER DIVISION COURSES

**4a. Schiller.** Study of Schiller's life and works. Class reading and interpretation of dramas and poems. Collateral readings. Practice in composition. Open to students who have had course 2, or its equivalent. Three units; first semester. (Biles.)

**4b. Modern Historical Prose.** Historical novels, and speeches by prominent statesmen relating to important periods in the history of Germany, such as the Reformation, the times of Frederick the Great, and the nineteenth century, with collateral readings in history. Composition continued. Three units; second semester. (Biles.)

**5. Grammatical Review.** A systematic review of grammar. Exercises in composition and conversation. Introduction to Vietor's system of phonetics, with exercises in reading phonetic texts and in pronunciation. Required of all students majoring in German. Open to those taking any course beyond 4. Two units; throughout the year. (Borthwick.)

**6. Heine.** Study of Heine's life and works. Lyrics; "Harzreise" and other prose writings. Collateral readings. Composition continued. Open to those who have had course 4, or its equivalent. Three units; first semester. (Biles.)

**6a. Outline of German Literature.** The development of German literature from the earliest fragmentary rhymes through the popular-epics and court-epics to the lyrics of the thirteenth century. Conducted in German. Collateral reading in modern German. Two units; first semester. (Borthwick.)

**7. Goethe.** Study of Goethe's life and works. Readings from "Aus meinem Leben," "Egmont," and "Tasso." Collateral reading and practice in composition. Follows course 6. Three units; second semester. (Biles.)

**7a. Outline of German Literature** (continued). From the fourteenth century to modern times. The folk-songs, the crit-

ical writers, the romanticists, the lyric poets, and the nineteenth century dramatists. Two units; second semester. (Borthwick.)

**8. Nineteenth Century Readings.** Representative dramas and novels from Grillparzer, Hauptmann, Freytag, and Schefel. Open to students who have had course 6 or its equivalent. Three units; first semester. (Biles.)

**9 Goethe's Faust.** Interpretation and discussion of both parts, with a short historical introduction, and collateral reading of Marlowe's "Faust" and of the "Puppenspiel." Three units; second semester. (Biles.)

#### GRADUATE COURSES

**10. German Literature of the Nineteenth Century** and its relation to the historical events and to the cultural and social development of the time. Both the history and the literature are studied, with much collateral reading and reports in German of the works read. Three units; throughout the year. (Borthwick.)

**11a. Teachers' Course.** A course in the teaching of German. Discussion of methods. Reading of textbooks in common use. Practice in the application of phonetics to the teaching of pronunciation. One unit; throughout the year. (Borthwick.)

**11b. Advanced Composition.** Colloquial practice. Phonetics in second semester. To be taken in conjunction with 11a. One unit; throughout the year. (Borthwick.)

**12. Lessing.** Study of Lessing's life. Selections from his dramas and prose writings. Special attention paid to his critical works, and their service to German literature. Three units; first semester. (Borthwick.)

**13. Middle High German.** Introductory Grammar. Selections from the "Nibelungen Lied" and "Armer Heinrich." Three units; second semester. (Borthwick.)

**Major Work.** Thirty semester units, exclusive of course 1.

**High School Teacher's Recommendation.** Courses 2, 3, 4, 5, 6, 6b, 7, 7b, 11, and one graduate course. (The equivalent of German 1 is presupposed for entrance.)

## GREEK

**ELEANOR ADELAIDE GARDNER, Instructor**

### LOWER DIVISION COURSES

1. **Elementary Course.** Thorough drill in grammar and Greek composition. Xenophon's *Anabasis*. Five units; throughout the year.

2. **Homer.** *Iliad*, Books I-IV. Homeric dialect, scansion and mythology. Three units; first semester.

3. **Plato: Apology and Crito** and selections. Study of life and times of Plato. Greek prose composition. Three units; second semester.

4. **Herodotus and Lucian.** Two units; first semester.

5. **Aristophanes** and selections from Homer's *Odyssey*. Two units; second semester.

### UPPER DIVISION COURSES

6. **Introduction to Greek Tragedy.** Study of the presentation of Greek drama. Two hours; either semester.

Other courses by special arrangement.

## HISTORY

\*TULLY C. KNOLES, ROY MALCOM, ROCKWELL D. HUNT,  
JAMES MAIN DIXON, FRANK J. KLINGBERG, Professors;  
LESLIE F. GAY, JR., Associate Professor.

### LOWER DIVISION COURSES

1. **English History**, with special reference to social and literary development. Textbook, supplemented by lectures, reports and collateral reading. Two units; throughout the year. (Klingberg.)

---

\*On leave of absence.

**2. English History in Shakespeare.** (a) The Lancastrian Tetralogy; "Richard II"; "Henry IV," 1 and 2; "Henry V." (b) The Yorkist Tetralogy: "Henry VI," 1, 2, 3; "Richard III." (c) "King John" and the days of Magna Charta. (d) "Henry VIII" and the English break with Rome. (e) British Legendary History: "Cymbeline," "Lear." The various sections are given in successive semesters. Two units; either semester. (Dixon.)

**3. Scottish History.** (a) Scotland in the sixteenth century, with special attention to Scott's "Lady of the Lake." (b) Celtic Scotland, with special attention to Shakespeare's "Macbeth." Three units; first semester. (Dixon.)

**4. Colonial History of America, 1000-1760.** Sources of American life, steps in the unifying process. Study of the fundamental laws of the colonies. Lectures, reports and investigations. Two units; first semester. (Malcom.)

**4a. History of America, 1760-1787.** An investigation of the causes leading to the Revolution. Study of the movement for union and the Constitutional convention of 1787. Lectures and reports. Two units; second semester. Courses 4 and 4a prerequisites for History 13. (Malcom.)

**5. Greek History.** A survey of Greek history from the earliest times to the death of Alexander the Great. Lectures, readings, and reports. Three units; first semester. (Gay.)

**6. Roman History.** A course covering the development of Rome from the foundation of the city to the close of the fourth century A. D. Lectures, readings, and reports. Three units; second semester. (Gay.)

**7. Mediaeval History.** A general survey of the mediaeval period, with special reference to the development of the great institutions, both of church and state. Discussions on mediaeval philosophic conceptions. Lectures, readings, papers. Three units; both semesters. (Gay.)



## UPPER DIVISION AND GRADUATE COURSES

**8. Renaissance.** A study of the Renaissance period as it affected European life and thought, with special reference to political and educational results. Lectures, reports, and readings. Three units.

**9. The Reformation.** A course open to advanced students and teachers. A study of the Reformation as it affected the social, economic and political development of Europe, combined with course 8. Three units; first semester. (Klingberg.)

**10. The French Revolution and the Napoleonic Empire, 1789-1815.** A brief review of the Ancient Regime, followed by a study of the political, social, and international aspects of the French Revolution and the Napoleonic Empire. Three units; first semester. (Klingberg.)

**11. Europe Since the Congress of Vienna.** A course covering the political development of Europe from the close of the Napoleonic Wars to the present time. Three units; second semester. (Klingberg.)

**12. Asiatic Studies.** (a) The Founding of British Rule in Hindustan, with special attention to the careers of Clive and Hastings. (b) The Spanish Conquest and Government of the Philippines and the recent American Occupation. (c) The Portuguese in Asia, with special attention to the epic of Camões, "The Lusiads." Each two units; both semesters. (Dixon.)

**13. History of the United States, 1787-1850.** A study of the development and history of national life in the United States from 1787 to the Compromise of 1850. Lectures and special investigations, involving an extensive use of the library. Special attention paid to the development of political parties. Three units; first semester. (Malcom.)

**13a. History of the United States, 1850-1912.** A continuation of course 13 from the Compromise of 1850 to the present time. Special attention paid to the period of Reconstruction,

political and economic. Lectures, reports and investigations. Three units; second semester. (Malcom.)

**14. English Constitutional History.** An examination into the origin and the evolution of the English Constitution. Lectures, readings, and reports. Prerequisite, course 1. Not offered in 1915-1916. Two units; throughout the year. (Klingberg.)

**14a. English Economic and Social History.** A course covering the economic and social history of England from the earliest times to the present. Prerequisite, course 1. Two units; throughout the year. (Klingberg.)

**15. Pacific Slope History.** A special lecture course, beginning with the Spanish colonial system. The origin of civilization in New Spain; the occupation and development of Alta California and the Oregon territory; the American conquest; the genesis of the Empire State of the Pacific. Special reference to California throughout. This course is designed to be especially helpful to history teachers and those expecting to teach history. Two units; throughout the year. (Hunt.)

**16. American Government.** A study of municipal, state, and national government in actual operation. Lectures, reports, research. Three units; throughout the year. (Malcom.)

**17. Teachers' Course.** A course for those who are planning to secure their High School Teachers' Recommendation. A discussion of the teaching of history in secondary schools, including criticism of text books and the uses of the library for high school students. Two units; first semester. (Malcom.)

**17a. The Expansion of Europe Since the Fifteenth Century.** European discoveries, explorations, and settlements in America, Asia, Africa, and Australasia. The rivalries of European powers, the growth of colonies, and the development of colonial systems and institutions. Two units; throughout the year. (Klingberg.)

**19. Greek History.** A critical study of the conditions of Greek life with especial reference to the evolution of political and social institutions. Lectures, readings, papers on assigned subjects for research. Open only to advanced students and teachers. Three units; first semester. (Gay.)

**19a. Roman History.** A series of investigations into the genesis, growth, and organization of the Roman State with especial emphasis upon the later Republican and early Imperial periods. Lectures, readings, papers on assigned subjects for research. Open only to advanced students and teachers. Three units; second semester. (Gay.)

**20. The History Seminar.** Primarily for graduates. The purpose of the seminar is to improve the method of study and teaching of history; to give training in historical method and criticism; and to assist students in doing constructive work. As a guide to the study of method, Langlois and Seignobos' "Introduction to the Study of History" is used. For the year 1914-15 the major portion of the time was given to the study of American Colonial institutions. Each student is asked to prepare special reports on this subject. For the year 1915-16 the topic for investigation will probably be selected from the field of European History.

**Major Work.** Thirty semester units.

**High School Teachers' Recommendation.** Six units each of Ancient, Mediaeval, Modern, English, and American History, courses 16 and 17.

## ITALIAN

EDGAR M. VON FINGERLIN, Professor

### LOWER DIVISION COURSES

1. Marinoni's "Italian Grammar." Bowen's "Reader." Goldoni's "Il Vero Amico," Grandgent's "Italian Composition." Three units; throughout the year.

2. **Manzoni's "I Promessi Sposi."** Fogazzaro's "Peregrinus," and other modern works. Composition. Two units; throughout the year.

#### UPPER DIVISION COURSES

3. **Dante, Tasso, Petrarca.** Advanced Composition. Lectures on Italian Literature. Two units; throughout the year.

### LATIN

**RUTH W. BROWN, Professor**

**MILDRED G. FORSYTHE, Assistant**

#### LOWER DIVISION COURSES

a. A course in forms and elements of syntax followed by the reading of easy prose. Intended for students who have had no Latin in High School. Five units; throughout the year.

b. **Cicero and Virgil.** Selections from Cicero's Orations and from the Aeneid. The course is planned for students who have completed course a or two years of High School Latin. Three units; throughout the year.

NOTE.—Courses a and b will not be accepted as major work or toward satisfying requirements for the Teacher's Certificate.

1. **Cicero and Virgil.** Cicero's "De Senectute" and Virgil's "Eclogues" will be carefully read, every effort being made to gain facility in reading Latin. Three units; first semester.

2. **Latin Syntax.** A thorough review of Latin syntax in lectures and written exercises. The course supplements course 1 and is strongly recommended to all registered for that course. Two units; first semester.

3. **Horace.** "Odes" and "Epodes." Attention will be given to subject matter, style, metrical reading, and study of the Augustan age and Horace's contemporaries. Three units; second semester.

4. **Latin Prose Composition.** Exercises in writing connected narrative and in rapid reading of easy prose. Recommended to all registered for course 3. Two units; second semester.

5. **Latin Comedy.** Terence and Plautus. At least three plays will be read with attention to early forms, meter, the development of Roman comedy, the Roman theater, and the presentation of plays. Three units; first semester.

6. **Livy and Tacitus.** The twenty-first and twenty-second books of Livy's history and selections from Tacitus will be read in connection with a study of the history and literature of the period of foreign conquest and of the early empire. Three units; second semester.

#### UPPER DIVISION AND GRADUATE COURSES

7. **Cicero's Letters.** A large number of Cicero's letters will be read with special attention to contemporary events. Two units; first semester.

8. **Roman Elegiac Poetry.** Selections from Catullus, Propertius, Tibullus, and Ovid, with reference to subject matter, artistic form, and the development of the Roman elegy. Two units; second semester.

9. **Advanced Latin Prose Composition.** A comparative study of English and Latin styles and of Latin equivalents of English constructions, and a systematic analysis of the simple and complex sentence structures. One unit; throughout the year.

10. **History of Latin Literature.** A general survey of Roman Literature. Selections from the representative authors will be read in translation or translated by the instructor. A reading knowledge of Latin is not required. Two units; second semester.

11. **Philosophical Writers.** Selections from Lucretius and Cicero with reference to the philosophical content. Two units; first semester.



**12. Juvenal, Martial, and Pliny.** Selections from the "Satires" of Juvenal, the "Epigrams" of Martial, and the "Letters" of Pliny. Lectures and assigned readings on Roman life and customs. Two units; second semester.

**13. The Teaching of Latin.** A study of methods and problems through lectures, reports, discussions, and practical exercises. Required of candidates for the High School Teacher's Recommendation in Latin. Two units; first semester.

**14. The Latin Seminar.** Primarily for graduates. In 1914-1915 the Seminar was devoted to a study of Virgil's Aeneid. The work consisted of the reading of the entire Aeneid, a critical study of Book VI, lectures, and special investigations. In 1915-1916 the work will be based upon Virgil's Eclogues and Georgics. Two units; throughout the year.

**Major Work.** Thirty semester units, including courses 1, 2, 3, 4, 9, and 10.

**High School Teacher's Recommendation.** Thirty semester units, including courses 1, 2, 3, 4, 10, and 13, and one graduate course.

## MATHEMATICS

PAUL ARNOLD, Professor

HUGH C. WILLETT, Associate Professor

### LOWER DIVISION COURSES

**1. Theory of Algebra.** A lecture and text book course in which emphasis is placed principally upon the theory and the development of algebra. This course includes a review of elementary algebra, special attention being given to proofs of fundamental laws and principles. Three units; both semesters. (Arnold.)

**2. Solid and Spherical Geometry.** The fundamental propositions of the Euclidean geometry of space. Three units; first semester. (Willett.)

**3. Trigonometry.** Plane trigonometry and its applications, the trigonometry of the right spherical triangle, and logarithms. Three units; second semester. (Willett.)

**4. Algebra.** Mathematical induction, equivalent equations, surds and complex numbers, theory of quadratic equations, simultaneous quadratic and higher equations, ratio, proportion, variation, the progressions and other simple series, inequalities, permutations and combinations, the binomial theorem for any exponent, limits and infinite series, determinants, the theory of equations. Two units, both semesters. (Willett.)

**5. Advanced Trigonometry.** This course is planned particularly for engineering students, and includes a review of plane trigonometry, as well as a thorough study of the fundamental principles of spherical trigonometry and the application of its formulas to the solution of spherical figures. Prerequisite, course 3 or entrance trigonometry. Two units; first semester. (Arnold.)

**6. Plane Analytic Geometry.** The analytic geometry of the straight line, the circle, and the conic sections, including a discussion of the general equation of the second degree and some special examples in higher loci. Five units; second semester. (Arnold, Willett.)

**7. Differential Calculus.** Development of the fundamental principles and formulas, with applications to various problems in geometry and analysis. Three units; first semester. (Arnold.)

#### UPPER DIVISION AND GRADUATE COURSES

**8. Integral Calculus.** The general principles of the integral calculus are developed, and the usual applications made to centers of gravity, to moments of inertia, and especially to geometry. Three units; second semester. (Arnold.)

**9. Advanced Analytic Geometry and Differential Equations.** The analytic geometry is a continuation of course 6, and includes a brief course in analytic geometry of three dimensions. The course in differential equations is elementary and open to students who have taken course 8. Two units; both semesters. (Arnold.)

**10. Teachers' Course.** Lectures on teaching mathematics, and lectures giving a review of elementary mathematics from the standpoint of preparing teachers for secondary schools. The history of mathematics is also studied. Two units; both semesters. (Arnold.)

**11. Analytical Mechanics.** The mathematical treatment of statics, kinematics, and dynamics. Prerequisite, courses 7 and 8. Three units, first semester; two units, second semester. (Lawrence.)

**12. Descriptive Astronomy.** A general course, requiring only the mathematics of courses 1-3. Open to students in the last two years of the college course. Two units; both semesters. (Lawrence.)

**Major Work.** Thirty semester units.

**High School Teachers' Recommendation.** Courses 1-8, 10, 12.

## MISSIONS AND COMPARATIVE RELIGION

ROBERT JOHN TAYLOR, Professor

**1. The Genesis of Missions.** A study of the nature, universality and purpose of religion, and a comparison of Christianity with the non-Christian religions. The spread of Christianity throughout the Graeco-Roman world, with special attention given to the difficulties which confronted the early church; followed by a survey of the missionary movements which resulted in the winning of Northern Europe. "The Mission and Extension of Christianity in the First Three Centuries," by Harnack, and "Missions and Apostles

of Mediaeval Europe," by Maclear, are used as experiences. Lectures, readings and reports. Two units; first semester.

**2. The Modern Progress of Christianity.** A study of Christianity since the Reformation. The development of the missionary movements of Protestantism from the time of the Pietists and Moravians to present-day missionary organizations, followed by a study of Christianity in its world-wide reach. The text used is, "Outlines of a History of Protestant Missions," by Warneck. Lectures, assignments and paper. Two units; second semester.

**3. Missions in the Far East and the Pacific Islands.** (a) **The Evolution of China.** A study of the physical, historical, social and religious view-points, and of the missionary problems, methods and results. Texts, "The Three Religions of China," by Soothill, "A Sketch of Chinese History," by Pott, and "The Changing Chinese," by Ross. (b) **The New Japan.** A study of the rapid rise of Japan out of the feudal conditions, and a survey of the history and present problems of Christian missions. Texts, "The Development of Religion in Japan," by Knox, and "Japan," by Murray. (c) **The Pacific Islands.** A study of the Christian forces in the Philippines and the Pacific Island groups. Text, "Outline Study of the Island World," by Montgomery. Two units; first semester.

**4. Missions in India, Moslem Lands, Africa and Spanish-America.** (a) **The Awakening of India.** A study of the history of the Indian peoples, followed by a survey of Christian missions, their problems and work. Text, "The History of Missions in India," by Richter. (b) **The Mohammedan World.** A study of Mohammedanism as a force in the world today. Special use is made of the Koran. Texts, "Mohammed," by Johnstone, "The Moslem World" by Zwemer, and "Koran." (c) **The Redemption of Africa.** A study of the physical and racial problems and of the pagan peoples. Texts, "Colonization of Africa by Alien Races," by Johnston, "Dawn in the Dark Continent," by Stewart, "Daybreak in the Dark Continent," by Naylor. (d) **The Rise of Spanish-America.** A



study of the aboriginal races of the Americas, the Spanish conquest, the colonial and war periods, and present-day struggles in South America and Mexico. This course is concluded by a study of the history and problems of Protestant missions. Texts, "South American Problems," by Speer, "South America," by Neely, and "Mexico of Today," by Winton. Two units; second semester.

## MUSIC

**Walter Fisher Skeelee, Professor**

Students who take harmony and theory or advanced instrumental or vocal work in the College of Music may be allowed College credit for the same, but the credit shall in no case exceed fifteen semester units, and will be given only upon the recommendation of the Dean of the College of Music.

## ORATORY

**BEULAH WRIGHT, Professor**

**GERTRUDE COMSTOCK, ELIZABETH YODER, LEONARD G. NATTKEMPER, Associate Professors**

### 1. Vocal Expression.

The principles of expression, voice building, and tone placing. Expression of the body. Interpretation of literature from the text. Two units; either semester.

### 2. Modern Poets and Prose Writers.

(a) Interpretation from living poets: Kipling, Van Dyke, Bridges, Noyes, Tagore, and others. (b) Continued interpretation from recent writers of prose: Wiggin, Wilkins, Stuart, Barrie, MacClaren. Two units; throughout the year.

### 3. Public Speaking.

(a) Extemporaneous work. Preparation and delivery of short speeches, such as talks on current public questions, toasts, discussion. (b) Extemporaneous work. Advanced public speaking. Two units; throughout the year.

4. **Debate.** Preparation of briefs for debate; argumentation. Two units; both semesters.



5. **Oratory.** A study of masterpieces of oratory. Text: Sears' "History of Oratory." The preparation and delivery of one original oration. Two units; second semester.

6. **Bible and Hymn Reading.** Vocal expression of the Bible and hymns; voice building. Text: Curry's "Vocal and Literary Interpretation of the Bible." Two units; second semester.

7. **Vocal Interpretation.** Lyrics. Training of the Imagination. Studies in Tennyson, Burns, Browning, Wordsworth, and others. Two units; first semester.

8. **Shakespeare.** "King Lear" or "Julius Caesar," "A Midsummer Night's Dream" or "Twelfth Night." Two units; second semester.

9. **Interpretation and Expression.** (See Education 12-13.)

Regular students in the College of Liberal Arts may elect a maximum of eight hours of class work in the College of Oratory without extra charge, provided that not more than two hours be taken in any one semester.

Students taking work in the College of Oratory may be allowed credit in the College of Liberal Arts, not to exceed fifteen semester units, credits to be given only upon the recommendation of the Dean of the College of Oratory.

## ORIENTAL STUDIES AND GENERAL LITERATURE

JAMES MAIN DIXON, Professor

JOHN HEDLEY, Lecturer in Chinese History and Civilization

IOHANE F. SAKAIZAWA, Instructor in the Japanese Language

ARTHUR F. TORRANCE, Instructor in Rhetoric

1. **Japanese History and Civilization.** Early Japan. Japan as the pupil of Korea and China. Influence of Buddhism. The rise of feudalism and of the Shogunate. The century of foreign intercourse. The later centuries of Tokugawa isolation and centralization. The Meiji era. Problems of today. Two units; first semester. (Dixon.)

**2. Chinese History and Civilization.** The successive dynasties of the great empire. Foreign relations during the last few centuries. Founding of the republic. Problems of today. Two units; second semester. (Hedley.)

**3. The Japanese Colloquial.** Chinese ideographs and Japanese syllabaries. Romaji transliteration. Grammar of the spoken language, with exercises. Two units; second semester. (Sakaizawa.)

**4. The Chinese Mandarin Language.** One unit; first semester. (Hedley.)

**5. Philippine History and Civilization.** The conquest of the islands in the sixteenth century; intercourse with China and Japan in early times; the Spanish occupation; the American teacher at work; the industrial future of the islands. Two units; second semester. (Dixon.)

**6. Hindustan and Its Problems.** A course based on the two Indian essays of Lord Macaulay, "Clive" and "Warren Hastings." Two units; second semester. (Dixon.)

**7. Persian Literature and Persian Themes in English Literature.** The "Rubaiyat" of Omar Khayyam; Firdausi's "Shah-Nameh"; Arnold's "Sohrab and Rustum." Two units; first semester. (Dixon.)

**8. Cameöns' "Lusiad," with a Study of the Epic in Literature.** Two units; second semester. (Dixon.)

**9. English Rhetoric and debating for Oriental Students.** A class intended to give Japanese and other Oriental students more readiness in the use of English. Two units; both semesters. (Torrance.)

**10. Christian Missions in the Orient Since the Days of Xavier.** The lives and work of Cary, Martyn, Duff, John Willians, Morrison, Burns, Verbeck, Nicolai, and the Judsons. Two units; second semester. (Dixon.)

**11. International Relations in the Pacific from Magellan to Commodore Perry.** The stories of Drake's and Caven-dish's circumnavigation of the globe; how Hideyoshi threat-ened to attack the Philippines; Mexico and Manila; the Isles of Gold and Silver. Two units. (Dixon.)

**12. Japanese Literature and Bibliography in English.** A discussion of authors who have written upon Japan from Kaempfer to Aston. The Japanese miniature poem (uta) in the original and in translations. Two units. (Dixon.)

**13. Celtic Civilization and Literature.** The Celtic race in Ireland, Scotland, Wales, the Isle of Man, and Brittany; the Gaelic and Cymric tongues; the origins of Arthurian ro-mance; the quality of modern verse by Celts; literary Celtic coteries; Gaelic grammar. Two units. (English elective.) (Dixon.)

## PHILOSOPHY AND PSYCHOLOGY

JAMES H. HOOSE, JOHN G. HILL, FESTUS E. OWEN, *Professors*

**1. General Psychology.** A textbook on Psychology. Lec-tures and collateral reading on various topics. Classroom demonstrations, with guidance to private observation. Sup-plementary elementary experimental work from Seashore's "Elementary Experiments in Psychology" and Witmer's "Analytical Psychology." Three units; first semester. (Owen.)

**2. Advanced Psychology.** An attempt to gain philosophic insight into the fundamental nature of mental life and human action. The aim here is to exhibit the general psychologic basis of (a) society and its institutions; (b) the history of nations; (c) art and literature; (d) science and philosophy. Recitations, lectures, collateral reading and papers on vari-ous topics. Special use is made of Harris' "Psychologic Foundations of Education"; Welton's "Logical Bases of Ed-ucation," and Miller's "Psychology of Thinking." Three units; second semester. (Owen.)

**3. The Psychology of Religion.** This course will deal with the normal and abnormal phenomena of religious experience; religion in relation to the subconscious and the conscious; faith cures, conversion, the growing life, inspired genius, non-religious persons, congregational and revival control, etc. Two units; second semester. (Hill.)

**4. The Psychology of Thinking.** A study of the nature and function of thinking. The aim is, through the insight gained into the nature and function of thinking, to develop in the student that habit of thought which is seen to be most fruitful in grappling with the problems that arise in individual experience. The viewpoint is biological. Inquiry is made into the conditions that give rise to problems and reflective processes, and the way in which thinking attacks and solves these problems is exhibited. Applications are made to the problems of education, science, and every-day life. Three units; second semester. (Owen.)

**5. Abnormal Psychology.** A study is made of dreams, hallucinations, hysteria, hypnotism, telepathy, spiritism, multiple personality, mental healing, the subconscious, and kindred topics. The aim is to discover the underlying principles of abnormal mental processes and to correlate them with the normal psychic activities. The course will be conducted by the lecture method, with special topics assigned members of the class for investigation and report. Two units; first semester. (Owen.)

**6. Social Psychology.** Based on assigned readings in Ross, McDougall, Baldwin, Cooley, and others. The social instincts, the development of the self, the social nature of the self. Imitation, custom imitation, fashion imitation. Suggestibility, the crowd, the mob, formation of permanent groups, group conflicts, group leadership, group consciousness. The formation of public opinion, its fundamental part in maintaining group stability and in securing group advancement. Two units; first semester. (Bogardus.)



**7. History of Psychology.** The history of the ideas that constitute the subject of psychology. These forms were discerned and their functions interpreted by the successive writers who appear in the History of Philosophy. The text used is Max Dessoir's "History of Psychology." One unit; both semesters. (Hoose.)

**8. Elementary Experimental Psychology.** Elementary laboratory study of visual, cutaneous, and auditory sensations; space perception; memory; attention; association; affective processes. The purpose of the course is to acquaint the student with the methods of experimental study of psychological problems, thus preparing him for advanced experimental work and at the same time giving him a more intimate knowledge of the facts and principles of general psychology. One hour per week will be devoted to lectures and reports, two laboratory periods per week to experimental work. Three units. (Owen.)

**9. Genetic Psychology.** A study of the genesis and evolution of conscious processes and behavior. Types of animal behavior, racial and individual development. Special attention to the growth and development of the child mind. The course is conducted with reference to the problems of the teacher. Two units; second semester. (Owen.)

**20. Ethics.** This course is based upon the text of Dewey and Tufts' "Ethics," with collateral study of Mill's "Utilitarianism," "Kant's "Metaphysics of Ethics," and Spencer's "Data of Ethics." The aim is to familiarize the student with the main aspects of ethical history and theory, and thus to furnish some method of estimating and controlling conduct. The general nature of moral conduct is studied, the evolution of the moral problem from primitive life to the present is traced, a comparative study of current ethical theories is attempted, and some application of the results of these studies is made to present problems of individual and social life. Two units; first semester. (Owen.)



**21. Theism and the Philosophy of Religion.** A careful examination of the leading theories offered in explanation of the ultimate nature of reality, and the theistic ground of a supreme, self-existent personal being as the only satisfactory explanation of all things. A clear philosophy of religion is sought by a sympathetic study of the light which recent science sheds upon the problems of nature, man, and mind. The texts used are Iverach and Bowne. Prerequisites, Philosophy 1. Two units; second semester. (Hill.)

**22. Evidences of Christianity.** The various evidences for the truth of Christianity are canvassed. It is shown how Christianity is the key to life's philosophy, answering the question, "How can we best explain the mysteries of life?" The many apologetic questions troubling the inquiring student concerning Christianity are vigorously considered. The questions of Authority, Revelation, Immortality, Christology, etc., are studied. Two units; second semester. (Hill.)

**23. Philosophy of the Christian Religion.** An attempt to understand the genius of Christianity by a searching study of the teaching of Jesus as found in the original sources. See *English Bible*, 6. Two units; first semester. (Hill.)

**40. Elementary Logic.** A study of the inductive and deductive aspects of reasoning, with application to practical problems. It is the aim of this course to stress the vital connection between logic and the practical problems of everyday life, to train the student in critical habits of thought, and to give him a good basis for further philosophical study. While Philosophy 1 is recommended as a preliminary, it is not required. Three units; first semester. (Owen.)

**41. History of Philosophy.** Rogers' "History of Philosophy," covering Ancient and Modern Philosophy. Three units; both semesters. (Hill.)

**42. Metaphysics.**—A study of the ultimate nature of things. An attempt to answer the question: What is the ultimate nature of reality, of being, of change and identity,

of time and space, of matter, of force and motion, of law and evolution, of God, the soul, and freedom? Offered alternate years with course 51. Two units; second semester. (Hill.)

**44. Philosophy of Civilization.** A course that investigates the forces and forms that have built up civilization. The study touches the Philosophy of History. Two units. (Hoose.)

**45. The Philosophy of Governments.** An inquiry into the forms that sovereign power has assumed in the process of historical governments. The study touches the Philosophy of History. Two units. (Hoose.)

**46. Oriental Philosophy.** Early Babylonian and Persian philosophical thought. Zoroaster and Zoroastrianism. Hindoo speculation. The forest philosophers of India. Buddhist philosophers. The ethics and intellectual activities of China. Shamanism, Confucianism and Taoism. Buddhism in China. The philosophers of Japan. Shintoism and Bushido. The Zen and other Buddhist philosophers. Two units; both semesters. (Dixon.)

**47. Philosophy of Education.** (See Education 10-11.) (Stowell.)

**48. Aesthetics.** (See Education 7.) (Stowell.)

**49. The Philosophy of Kant.** Select portions of Kant. Two units. (Omitted 1916-1917.) (Hill.)

**50. The Philosophy of Hegel.** Select parts of his philosophy. Two units. (Not given during 1915-16.) (Hill.)

**51. The Philosophy of Henri Bergson.** The text used is "Creative Evolution." This course seeks to understand the new philosophy of life—"vital impetus." Offered alternate years with course 42. Two units; first semester. (Hill.)

**52. Present Day Philosophy.** Select portions from Eucken. Royce, Bowne, Ward, Lodge, James, Nietzsche, Moore, Howison, Dewey, Stuart and Rashdell will be studied. Two units; second semester. (Hill.)

**PHYSICAL EDUCATION**

WM. RALPH LA PORTE, Director of Physical Education

RALPH GLAZE, Director of Competitive Athletics

EDNA A. COCKS, Director of Physical Education (Women)

CHESTER E. BOWERS, M.D., Medical Examiner of Men

ELSA H. HORSTMANN, M.D., Medical Examiner and Lecturer in  
Hygiene to Women

ERROL J. JANES, CLEMENT STOREY, RUTH WININGER,

GLADYS CONE, Gymnasium Assistants

The aims of the department are: (1) to develop organic power without which physical and mental efficiency are impossible, and thus to develop physical judgment, presence of mind, self-reliance, courage, and strength of will; (2) to secure harmonious muscular development and a reasonable degree of bodily skill and grace; (3) to conserve the social and moral values of sports and games, and give to all students an equal opportunity to take part in college athletics; (4) to develop the "habit of exercise" as a balance to the sedentary demands of University life; (5) to train physical educators and instructors, play leaders and recreation directors, for service in educational institutions, clubs, playgrounds, Young Men's and Young Women's Christian Associations, etc.

For description of the department equipment see Index under "Physical Education."

**Physical Requirement:** A minimum of four units physical credit is required of every student for admission to Junior standing. One unit credit represents the successful completion of a two-hour course lasting through one semester. Two units credit per semester may be secured by taking two such courses, and the full requirement thus be met in one year. All **Freshmen** are required to take at least one two-hour course throughout the year, in the Gymnasium (see Physical Education 1). If the physical condition warrants, they will be permitted to elect the other two units requirement in outdoor athletics, either in the Freshman year or later. (See Physical Education 4.) Physical Education 5 (Hygiene) is also required of Freshman women.

Women will consult the women's director before securing their gymnasium suits. Men's suits consist of white running pants, sleeveless shirt, supporter, and tennis shoes.

**Physical Examinations:** Every student upon entering the department is given a thorough physical examination, in order that the physical condition may be known; and where defects exist, special exercises are prescribed and advice given as to care of the body, etc. The heart, lungs, sight, and hearing are carefully tested, various strength tests applied, and measurements taken. Where the physical condition makes it advisable, students are not permitted to take regular gymnasium class work, but are given special corrective work suited to their needs and strength.

The physical examination must be taken before entering any class work, and therefore each student should make it a point to register early for gymnasium and get the examination out of the way before the last registration day. Attendance at class cannot be counted until the student has been duly examined.

**1. General Gymnastics.** A course combining recreation with developmental and corrective work, in the effort to develop organic power, motor efficiency, co-ordination, and a fair amount of muscular strength. Required of all Freshmen. Two or four hours per week, one or two units; throughout the year.

**(a) Men.** Free and light gymnastics, elementary heavy gymnastics, including all the more common pieces of apparatus, and recreative games and races.

**(b) Women.** Systematic class work in gymnastics, including work with dumbbells, Indian clubs, and wands; also rhythmical exercises for grace and harmony of movements. Proper carriage of body is taught by the use of fundamental Swedish and German gymnastics.

**2. Advanced Gymnastics.** A continuation of course 1 on a much more advanced scale. Open only to students who have satisfactorily completed course 1. The work is sys-



tematically progressive, and advances as fast as the ability of students permits. Two hours per week, one unit; both semesters.

(a) **Men.** Advanced apparatus will receive much attention, and opportunity will be given for specialization in various activities.

(b) **Women.** Advanced apparatus work, Swedish, German and aesthetic gymnastics.

3. **Corrective Gymnastics.** Designed to give personal instruction and training to students whose condition prevents their participation in the regular course. Required of all Freshmen unfitted to take course 1. Two hours per week, one unit; throughout the year.

(a) **Men.**

(b) **Women.**

4. **Out-door Sports.** A supplement to course 1. Students may elect only two of the four required physical credits in this course.

(a) **Men.** Football, track, basketball, baseball.

(b) **Women.** Tennis, basketball, volleyball, indoor baseball, handball, hockey.\*

5. **Hygiene.**

(a) **Men.** (See Department of Biology, General Biology 1 and 2.)

(b) **Women.** Lectures and readings covering the following topics: Food and clothing; bathing; respiration and circulation; general care of the body, with special attention to the eye, ear, nose, and throat; rest and recreation; diseases; sanitation. Two units; throughout the year.

---

\*Note.—Courses 1-4, inclusive, apply only on the four required physical credits. The following courses do not apply on the required work, but credit is regularly given for them, as indicated, on the one hundred and twenty units required for graduation. Courses 7-12, inclusive, have been added, with still others to follow next year, looking toward the conferring of a certificate in Physical Education. Students desiring such work will do well to confer with the Physical Director before planning their course.



**6. Normal Course.** Intended primarily for students desiring to prepare for Physical Education work in schools, playgrounds, and Young Men's or Young Women's Christian Associations. The course consists of a practical training in the administration and management of a physical department, combined with reading, reports, and lectures on related subjects. Anderson's "Best Methods of Teaching Gymnastics" will be used as a text. A high standard of efficiency both in individual skill and in ability to teach all forms of gymnastics is required of those who complete the course with a recommended grade. Those who merit a grade of A will be entitled to receive from the director a recommendation as an assistant physical director. Two hours lectures and practice, and two hours observation and experience per week, two units; throughout the year.

(a) Men.

(b) Women.

**7. History and Literature of Physical Education.** The various systems of physical education, both past and present, are considered in their relation to civilization. The noted German and Swedish systems are given a comparative study, special emphasis, however, being placed on the modern American movement, noting the work and influence of prominent leaders such as Sargent, Hitchcock, Seaver, Gulick, and others. Two units; first semester. (LaPorte.)

**8. Playground Methods.** History of playgrounds; theory of play; administration of playgrounds; construction and equipment; need of playgrounds in relation to city problems; a study of the growth of the child, with application of games and exercises. Two units; first semester. (Cocks.)

**9. First Aid to the Injured.** A course based on the International Red Cross Text Book on First Aid, covering emergency treatment of sprains, dislocations, fractures, poisons; the use of bandages, methods of carrying the wounded, recovery of drowning persons. Two units; second semester. (LaPorte.)

**10. Gymnastic Games and Folk Dances.** A supplement to course 8, Playground Methods, intended to provide a working knowledge of games and folk dances, for use on the playground and in the gymnasium. The work consists of lectures on theory of play, theory of games, readings, reports, and papers, together with practical application of the theory in the gymnasium. Two units; second semester. (Cocks.)

**11. Physiology of Exercise.** A study of the effects of various kinds of exercise on health, with consideration given to movements, heat, combustion, fatigue, breathlessness, stiffness, exhaustion, overwork, exercises of speed, strength, and endurance. Special emphasis will be placed upon the results, both good and bad, of exercise. Two units; first semester. (LaPorte.)

**12. Kinesiology.** A brief study of the motor organs with reference to joint and muscular mechanism. The relation of various sets of movements to muscular development. Definitions, grouping, and arrangement of gymnastic movements. Two units; first semester. (Cocks.)

## PHYSICS

ARTHUR W. NYE, J. H. MONTGOMERY, Professors  
D. B. MUNROE, L. T. CLARK, H. E. REDDICK, E. C. SNYDER,  
Laboratory Assistants

### LOWER DIVISION COURSES

**1a. General Physics. Electricity.** Lectures and recitations. Three units; first semester. (Montgomery.)

**1b. General Physics. Heat.** Lectures and recitations. Two units; first semester. (Nye.)

**1c. Physical Measurements.** Laboratory work in Electricity or Heat or both. One or two units; first semester. (Nye.)

**2a. General Physics. Mechanics.** Lectures and recitations. Three units; second semester. (Montgomery.)

**2b. General Physics. Light.** Lectures and recitations. Two units; second semester. (Nye.)

**2c. Physical Measurements.** Laboratory work in Mechanics or Light or both. One or two units; second semester. (Nye.)

All the above courses are required of all Engineering students and of students majoring in Physics. Kimball's "Physics" is the basis of the class room work, and Miller's "Laboratory Physics" is followed in the laboratory.

**3. Mechanics.** An advanced laboratory course continuing course 2; may be taken concurrently with it. Experiments are made along such lines as the moment of inertia, uniformly accelerated motion, modulus of rigidity, force of gravity, etc. Four periods of laboratory work per week, with occasional lectures. Two units; either semester. (Nye.)

**4. Shop Work.** Instruction in the use of wood and metal working tools and machinery, including cutting, filing, drilling, tapping, polishing, screw-cutting and elementary lathe work. Two or four periods in laboratory, one or two units; either semester. (Montgomery.)

**5. Applied Electricity.** A course in the principles and applications of electricity. Prerequisites, Physics 1a. Two units; second semester. (Nye.)

**5c. Physical Measurements.** Laboratory course to accompany 5. One unit; second semester. (Nye.)

#### UPPER DIVISION COURSES

**6. Electrical Measurements.** A laboratory course in which the theory and methods of exact electrical determination are taken up, including the determination of resistance by various methods, galvanometer constants, the measurement of current and electromotive force, insulation tests, hysteresis and permeability tests, the calibration of instruments, the use of

condensers, the measurement of induction, etc. Six periods per week. Two units; either semester. (Montgomery.)

**7. Advanced Heat.** A laboratory course consisting of work of the nature set forth in Millikan's "Mechanics, Molecular Physics and Heat." Four periods in the laboratory. Two units; either semester. (Nye.)

**7a. Advanced Heat.** Study of state changes, kinetic theory, radiation, and exact methods of experimental work. Two units; first semester. (Nye.)

**8. Advanced Light.** Study of lens imperfections and methods of correcting; interference, polarization, spectroscopy, etc. Two units; second semester. (Nye.)

**10. Photometry and Illumination.** Lectures and recitations. A study is made of the physiological and physical phenomena of artificial illumination, methods of measurement, types of photometers, types of illuminants and their characteristics, reflectors, and the principles of interior and street illumination. Three units; first semester. (Nye.)

**11. Photometry.** A laboratory course to accompany Physics 10. One or two units; first or second semester. (Nye.)

**12. Thermodynamics.** A study of the laws of gases, heat cycles, temperature-entropy diagrams, pressure-volume diagrams applied to gas, hot air and steam engines and refrigerating machines. One unit; first semester. (Nye.)

**13. Sound.** General principles, theory of vowel sounds, construction of musical instruments, architectural acoustics. Two units; first semester. (Nye.)

**14. Radio-activity and Passage of Electricity Through Gases.** Lectures and recitations. Two units; second semester. (Montgomery.)

For additional work in theoretical and applied Physics see courses in Civil and Electrical Engineering.

**POLITICAL SCIENCE**

ROY MALCOM, FRANK J. KLINGBERG, *Professors*  
LESLIE F. GAY, JR., *Associate Professor*

**UPPER DIVISION COURSES**

1. **Political Science.** The historic origin of political science; theories of the state; the nature of sovereignty; the structure and province of government. Lectures, readings, reports. Two units; throughout the year. (Malcom.)

2. **International Law.** The nature, sources, and principles of International Law; the influence of Christian civilization upon rules. Special attention is given to The Hague Conferences of 1899 and 1907. Lectures, reports, and study of cases. Two units; throughout the year. (Gay.)

3. **Parties and Governments in Continental Europe.** A series of studies in the field of the comparison of the different methods of government in actual practice in the various states of continental Europe. Lectures, readings, and reports. Three units; second semester. (Klingberg.)

**SPANISH**

KATHERINE T. FORRESTER, ROY E. SCHULZ, *Professors*  
ESTER HUET, *Instructor*

**LOWER DIVISION COURSES**

1. **Elementary Spanish.** The essentials of Spanish grammar, with careful drill in pronunciation, reading and writing. Selections from Hill's "Spanish Tales" are read during the first semester, and two or more short novels during the second. Five units; throughout the year. (Schulz and Huet.)

**Note.**—Not more than five units of Spanish 1 can be credited toward a major course in Spanish.

2. **Advanced Spanish.** The selections in Hill's and Reinhardt's "Spanish Short Stories" are read and discussed in class. Collateral reading and reviews in Spanish of two novels. Advanced grammar and composition, with Ramsey's "Grammar" as a guide. Three units; first semester. (Forrester and Huet.)



**3. Advanced Reading and Composition.** Selections from "Gil Blas" and "Don Quixote" are read with a view to familiarizing the student with typical characteristics in Spanish literature. Collateral reading of two novels, with reports in Spanish. Advanced grammar and composition. Three units; second semester. (Forrester and Huet.)

**4. Spanish Conversation.** An attempt is made to gain a working knowledge of colloquial Spanish on the basis of text books and Spanish magazines. Two units; throughout the year. (Forrester.)

**5. Commercial Spanish.** An attempt is made to gain a business vocabulary and a knowledge of business forms. Two units; second semester. (Schulz.)

#### UPPER DIVISION AND GRADUATE COURSES

**6. Modern Novels and Drama.** Selections from the works of important novelists and dramatists are read and discussed in class and as collateral work, with reports in Spanish. Advanced theme writing based on the selections read. Three units; first semester. (Forrester.)

**7. Modern Novels and Drama.** A continuation of course 6 with special reference to Spanish life and the Spanish viewpoint. Three units; second semester. (Forrester.)

**8. Nineteenth Century Literature.** A special study of one or more authors. During 1916 a study will be made of Becquer's life and works. Two units; second semester. (Schulz.)

**9. History of Spanish Literature.** A rapid survey of Spanish Literature with particular reference to Lyric Poetry, using Ford's "A Spanish Anthology" as a text. Alternates with course 11; not given during 1915-1916. Two units; first semester. (Forrester.)

**10. History of Spanish Literature.** A continuation of course 7 with particular stress on Spanish Prose, using Pidal's "Antologia de Prosistas Castellanos" as a text. Alternates with course 12; not given during 1915-1916. Two units; second semester. (Forrester.)

**11. The Drama of the Golden Age.** A critical study of the period, with the reading and discussion of selections from Lope de Vega, Calderon, and Tirso de Molina. Two units; first semester. (Forrester.)

**12. Nineteenth Century Drama.** A careful study of modern Spanish Drama with selections from prominent authors. Two units; second semester. (Forrester.)

**13. Advanced Composition.** The translation of long selections, with particular attention to idioms and style. Two units; first semester. (Forrester.)

**14. Teacher's Course.** A study of methods of presenting the four-year high-school course in Spanish, with demonstrations and practice in the preparatory school. Two units; second semester. (Schulz.)

**15. Cervantes' "Don Quijote."** A critical study of Cervantes' masterpiece. One unit; first semester. (Forrester.)

**16. Spanish Ballads.** A study of the Spanish romancero, using Morley's "Spanish Ballads" as a text. Collateral reading of Pidal's "El Romancero." One unit; second semester. (Forrester.)

**17. Old Spanish.** A study of the development of the Spanish language in the earlier period of its history. The equivalent of at least two years of preparatory Latin is a prerequisite. Two units; second semester. (Schulz.)

**18. Castilian Phonetics.** A study of the conclusions of Araujo, Josselyn and Colton, with frequent practice in transposition into the symbols of the National Phonetic Association. Two units; first semester. (Not given in 1915-1916.) (Schulz.)

**Major Work.** Thirty semester units, including course 13, and of which only five units may be from course 1.

**High School Teacher's Recommendation.** Thirty semester units, including course 14, of which only five units may be from course 1.

# COURSES IN ENGINEERING

## CIVIL ENGINEERING

CHARLES W. LAWRENCE, Professor

C. W. COOK, Associate Professor

W. A. JEPSON, E. H. JONES, C. W. SPROTTE, H. L. BRIGGS,  
Field Assistants

The great industrial development of recent years in every part of the United States has created a large demand for trained civil engineers. The course in Civil Engineering has been made broad in order to meet this demand by providing a sufficient foundation for the wide range of practice now included under Civil Engineering.

Very few college students know in what part of this wide field their life work will lie. Because of this, and the great difficulty of mastering fundamentals during the stress of professional work, it has seemed best to provide a broad university preparation and to defer specialization to the period of active employment.

The course is designed to give a practical as well as a theoretical training. Nearly as much time is spent in the drawing room, laboratory, and field as in the lecture room.

By consulting the schedule following, it will be seen that considerable time is devoted to Mathematics, English, and the Sciences. Of the more technical work, Field Engineering is given very full treatment in lecture, room, office and field.

In the third year Theoretical Mechanics is thoroughly developed and forms the basis for the designing and construction that occupy the remainder of the course. The importance of correct methods of thought and practice is constantly insisted upon.

A very large amount of important engineering work is continually going on in the vicinity of Los Angeles. The proximity of harbors, mines, irrigation and water supply projects, several transcontinental railroad terminals, and extensive electric power plants and railway systems, offers a

diversity of excellent examples of engineering construction. Students in this department, accompanied by instructors, are required to inspect much of this work and to present written reports on what they have seen.

## REQUIRED COURSE IN CIVIL ENGINEERING

### First Year

#### FIRST SEMESTER

	Lab. Hours.	Class Hours.
Mathematics, 4, 5—Algebra and Trigonometry....	....	4
Chemistry, 2—Qualitative Analysis.....	....	3
Chemistry, 2a .....	6	....
Civil Engineering, 1—Surveying Theory .....	....	2
Civil Engineering, 2—Field Work.....	6	....
Drawing, 4 .....	6	....
English, 1 .....	....	3

#### SECOND SEMESTER

Mathematics, 6—Analytical Geometry.....	....	5
Chemistry, 3 .....	....	3
Chemistry, 3a .....	6	....
Civil Engineering, 1.....	....	2
Civil Engineering, 2.....	6	....
English, 1 .....	....	3
Drawing, 5 .....	6	....

### Second Year

#### FIRST SEMESTER

Mathematics, 8—Differential Calculus.....	....	3
Geology, 2—Mineralogy .....	....	2
Civil Engineering, 13—Materials.....	....	3
Drawing, 6—Descriptive Geometry.....	3	1
Physics, 1—Electricity and Heat.....	3	5

Lab. Class  
Hours. Hours.

## SECOND SEMESTER

Mathematics, 9—Integral Calculus.....	---	3
Geology, 2 .....	---	2
Civil Engineering, 3—Advanced Surveying.....	6	2
Drawing, 6—Descriptive Geometry.....	3	1
Physics, 2—Mechanics and Light.....	3	5

## Third Year

## FIRST SEMESTER

Civil Eng., 7—Analytical Mechanics.....	---	3
Civil Eng., 8—Mechanics of Materials.....	---	2
Civil Eng., 15—Graphical Statics .....	3	---
Civil Eng., 4—R. R. Engineering Theory.....	---	2
Civil Eng., 5—R. R. Engineering Practice.....	6	---
Elect. Eng., 1—General .....	---	5
Elect. Eng., 4—Steam Engineering .....	---	2

## SECOND SEMESTER

Civil Eng., 7 .....	---	2
Civil Eng., 8 .....	---	3
Civil Eng., 16—Stresses .....	---	3
Elect. Eng., 5—Steam Engineering.....	---	2
Civil Eng., 9—Hydraulics .....	---	3
Civil Eng., 5 and 6—R. R. Engineering.....	3	2
Civil Eng., 18—Structural Design .....	6	---

## Fourth Year

## FIRST SEMESTER

Civil Eng., 21—Reinforced Concrete .....	3	2
Civil Eng., 18—Structural Design .....	6	1
Geology, 5 .....	---	2
Mathematics, 12—Astronomy .....	---	2



	Lab. Hours.	Class Hours.
Civil Eng., 11—Water Supply .....	...	2
Civil Eng., 12—Sanitary Engineering .....	...	2
Civil Eng., 10—Irrigation Engineering .....	...	1
Economics, 1 .....	...	3
Civil Eng., 23—Thesis .....	3	...

## SECOND SEMESTER

Civil Eng., 18 .....	6	...
Geology, 5 .....	...	2
Mathematics, 12 .....	...	2
Civil Eng., 21—Reinforced Concrete .....	3	2
Civil Eng., 22—Contracts and Specifications.....	...	1
Civil Eng., 19—Highway Engineering .....	...	2
Civil Eng., 23—Thesis .....	6	...
Economics, 1 .....	...	3

## COURSES IN CIVIL ENGINEERING

1. **Surveying.** Recitations and lectures on the theory and practice of plane surveying. The course includes the use and care of instruments; methods of procedure and of keeping notes for land, city, and mining surveys; instruction in computation and platting of field notes. Prerequisite, a course in plane trigonometry. Two units, throughout the year. Text, Breed and Hosmer's "Principles and Practice of Surveying," Vol. 1. (Cook.)

2. **Surveying Field Work.** The practical adjustment of surveying instruments; the proper method of keeping clear field notes, and the working of field problems with chain, tape, level, plane table, transit, compass, etc. The work in the drawing room consists of platting the field notes and making profiles and maps. Six hours, two units, throughout the year, course 1 to be taken concurrently. Text, "Pence and Ketchum's Field Manual." (Cook.)

**3a. Higher Surveying.** Recitations and lectures on the theory and practice of the more advanced surveying problems, including hydrographic surveying, and mapping. Prerequisite, courses 1 and 2. Two units; second semester. Text, Breed and Hosmer, Vol. II. (Cook.)

**3b. Higher Surveying, Field Work.** Topographical surveys with plane table and stadia, city surveys, mine surveys, measurement of base lines and triangulation systems, determination of meridian and latitude. Prerequisite, courses 1 and 2. Six hours' field work, two units. (Cook.)

**4. Railroad Engineering.** A course including the theory of curves, switches, and sidings; the making of reconnoissances and preliminary and location surveys; the computation of earthwork and determination of structures; and the making of final estimates of cost. Prerequisites, courses 1 and 2. Two units; first semester. Text, "Allen's Railroad Curves and Earthwork." (Cook.)

**5. Railroad Engineering, Field and Office Work.** Practice in laying out curves, making a complete survey for a short line of railway, and doing the office work. Course 4 must be taken concurrently. Eight hours, three units, first semester; three hours, one unit, second semester. Text, "Allen's Railroad Curves and Earthwork." (Cook.)

**6. Economics of Railroad Location.** The fundamental principles of economical location, construction and betterment surveys; a discussion of yard and terminal design; the study of the permanent right of way in regard to its relation to maintenance and operation. Prerequisite, course 4. Two units; second semester. Text, "Raymond's Railroad Engineering." (Cook.)

**7. Analytical Mechanics.** The mathematical treatment of statics, kinematics and dynamics, including the determination of center of gravity, moment of inertia, centrifugal force, etc. Prerequisite, Mathematics 8 and 9. Three units, first semester; two units, second semester. Text, "Hancock's Applied Mechanics for Engineers." (Lawrence.)

**8. Mathematics of Materials.** A mathematical course in the resistance and elasticity of materials, stresses and strains, shearing, flexure, beams, columns, and shafts. Course 7 must be taken concurrently. Two units, first semester; three units, second semester. Texts, Boyd's "Strength of Materials," and Shepard's "Problems in Strength of Materials." (Cook.)

**9. Hydraulics.** Hydraulic pressure, strength of pipes, flow of liquids through pipes and orifices and over weirs, losses of head, flow of water in open channels, dams of masonry and earth, hydraulic motors and machinery. Prerequisite, course 7. Three units, second semester. Text, "Hughes and Safford's Hydraulics." (Lawrence.)

**10. Irrigation Engineering.** Diversion, conveyance, and application of water for irrigation. Design of reservoirs, dams and diversion works. One unit; first semester. Text, Newell and Murphy's "Irrigation Engineering."

**11. Water Supply.** The determination of the quantity and quality of supply, water purification and conservation, design of a system. Prerequisite, course 9. Two units; first semester. Text, "Turneure and Russel's Public Water Supplies." (Lawrence.)

**12. Sanitary Engineering.** The drainage of buildings, treatment and disposal of sewage, sewer systems for cities. Prerequisite, course 9. Two units; first semester. Text, "Sewage Disposal, Kinnicutt, Winslow and Pratt." (Lawrence.)

**13. Materials of Construction.** A study of the manufacture and properties of stones, cements, concretes, timber, iron, steel, etc., with special attention to the determination of the safe working stresses. Three units; first semester. Text, "Johnson's Materials of Construction." (Cook.)

**15. Graphical Statics.** The graphical determination of the stresses in engineering structures. Course 7 must be taken concurrently. Three hours, one unit; first semester. Lectures and Drafting. (Lawrence.)

**16. Stresses in Framed Structures and Arches.** The analytical and graphical methods applied to determining stresses in roof and bridge trusses and masonry arches. Prerequisite, course 15. Three units; second semester. Text, Turneaure's *Modern Framed Structures*, Vol. I. (Lawrence.)

**17. Engineering Laboratory.** The testing of engineering materials. Prerequisite, course 13. Three laboratory hours, one unit; first semester. Work done at the Osbourn Testing Laboratory (by special arrangement).

**18. Structural Design.** The theory for and practice of making complete designs for steel bridges, roofs and other structures. Lectures, drawing, and computing. Prerequisite, courses 8, 13 and 16. One hour lecture, six hours drafting, three units. Text, "Thayer's Structural Design," Vols. I and II. (Lawrence.)

**19. Highway Engineering.** Roads and streets of broken stone, paved and oiled roads, the location of new roads. Two units; second semester. Text, "Baker's Roads and Pavements." (Lawrence.)

**21. Reinforced Concrete.** The theory, design, construction and estimates of concrete and reinforced concrete structures, including buildings, foundations, retaining walls, tunnels, culverts, dams, chimneys, arches, and bridges. Two hours lecture, three hours designing, three units; throughout the year. Text, Hool's "Reinforced Concrete Construction," Vols. I and II. (Cook.)

**22. Contracts and Specifications.** A synopsis of the law of contracts as applied to engineering construction and a study of typical contracts and specifications. The course includes riparian rights, boundary lines, survey descriptions, etc. One unit; second semester. Text, Waddell and Wait, "Specifications and Contracts." (Lawrence.)

**23. Thesis.** A study of some special engineering problem or an independent investigation by the student. The subject must be approved by the professor in charge of the depart-

ment of Civil Engineering and by the professor who would have immediate direction of the work proposed, not later than November 1st of the senior year. It must be completed and submitted by June 1st of the same year. One unit, first semester; two units, second semester. (Lawrence.)

## ARCHITECTURE

The work in architecture is being offered this year for the first time. Most of the courses included are now being given in the departments of Fine Arts and Engineering. The courses in Architecture noted below are available whenever a sufficient number of students desire to take them. Professors Judson, Lawrence, Montgomery and Assistant Professor Weatherhead will give this work.

A four years' course in the theory and practice of architectural planning and composition, the history and the development of its classic forms and a study of the methods of structural design.

### First Year

	First Semester	Second Semester
Mathematics, 4, 5, 6.....	4	5
Chemistry, 2, 2a, 3, 3a.....	5	5
English, 1 .....	3	3
Drawing, 1, 3.....	2	2
Design .....	1	1
Drawing—Charcoal from cast.....	1	...
Drawing—Out of door sketching.....	1	1
Art History .....	1	...
Mythology .....	...	1

### Second Year

Mathematics, 7, 8—Calculus.....	3	3
Physics, 1abc, 2abc.....	3	3
Drawing, 6—Descriptive Geometry.....	2	2



	First Semester	Second Semester
--	-------------------	--------------------

Architecture, 1—Architectural Drawing and Composition .....	2	2
Architecture, 3—History of Ornament.....	1	1
Water Colors .....	1	1
Design .....	2	2
Civil Eng., 13—Materials of Construction....	3	....
Drawing—Drawing from life .....	1	....
Clay Modeling .....	....	1
Drawing—Out of door sketching.....	....	1

### Third Year

Civil Eng., 7—Mechanics .....	3	2
Civil Eng., 8—Strength of Materials.....	2	3
Architecture, 2—Architectural Drawing and Composition .....	2	2
Architecture, 4—History of Architecture.....	2	2
Architecture, 5—Design in Historic Styles....	2	2
Architecture, 6—Architectural Rendering ....	2	....
Civil Eng., 15, 16—Graphic Statics, Stresses	2	3
Architecture, 7—Heating and Ventilating.....	2	....
Architecture, 8—Bldg. and Equip. Eng'r'g....	....	2
Civil Eng., 18—Structural Design.....	....	3

### Fourth Year

Civil Eng., 18—Structural Design ....	3	3
Civil Eng., 21—Reinforced Concrete .....	3	3
Architecture, 9—Interior Decoration.....	2	2
Architecture, 11—Advanced Arch. Design....	2	3
Architecture, 10—Landscape Design .....	2	....
Economics, 1 .....	3	3
Civil Eng.—Contracts and Specifications.....	....	1
Thesis.		

**COURSES IN ARCHITECTURE**

1. **Architectural Drawing and Composition.** This course begins with the making of working drawings and composition applied to small buildings. It includes the framing plans of the floors, walls, and roof and full size details of some of the essential portions. Six hours, throughout the year.

2. **Architectural Drawing and Composition.** A continuation of course 1. The making of elevations, floor plans and construction details for large buildings, such as stores, hotels, loft and office buildings. Six hours, throughout the year.

3. **History of Ornament.** A study of the origin and the basic qualities of ornament and its application to the architecture of the various periods. One hour, throughout the year.

4. **History of Architecture.** A course tracing the development of building from the earliest times to the present day. Two hours, throughout the year.

5. **Design in Historic Styles.** To be taken in conjunction with Architecture 4. It consists of exercises in original designs illustrating the different styles.

6. **Architectural Rendering.** Practice in line work, shades and shadows and color, and technic in various mediums. Six hours, throughout one semester.

7. **Heating and Ventilation.**

8. **Building Equipment Engineering.**

9. **Interior Decoration.** A series of practical and theoretical problems in the decorating of the interiors of public and private buildings.

10. **Landscape Design.** Lectures and practice in planning and design of grounds and parks.

11. **Advanced Design.** Original advanced work on some assigned problem.

**ELECTRICAL ENGINEERING****ARTHUR W. NYE, J. H. MONTGOMERY, Professors**

The courses offered in this department are designed to fit young men to engage in the operation and production of electrical apparatus, and also in the application of electricity to the Arts and Sciences.

During the freshman and sophomore years there is laid a broad foundation, consisting of Physics, Mechanics, Chemistry, Surveying, and Drawing. During the junior and senior years special studies in electricity and applied electricity are pursued. These involve the theory of electricity and magnetism with application to direct-current machines and measuring instruments, and alternating-current machinery and apparatus, comprising alternators, synchronous and induction motors, transformers and rotary converters. Courses are also given in Electrical Distribution and Transmission, and Lighting and Power Plants.

The work of the engineering laboratories is co-ordinate with that of the lecture and class room, and aims to give a practical knowledge of electrical measurements and the handling of electrical machinery.

Southern California, in its present state of rapid development, offers exceptional opportunity to the hydraulic and electrical engineer. The work of the University is excellently supplemented by the large amount of work under construction. The engineers and superintendents in charge of these have been very courteous in aiding the classes on their various trips of inspection. The various power and electric plants in and about Los Angeles afford examples of electric development of high-tension and power transmission not surpassed by those of any other city in the United States. Various excursions are made to these plants, which are explained in detail by the superintending engineers.

## REQUIRED COURSE IN ELECTRICAL ENGINEERING

## First Year

## FIRST SEMESTER

	Lab. Hours.	Class Hours.
Mathematics, 4, 5—Algebra, Trigonometry.....	....	5
Drawing, 4 .....	6	....
Chemistry, 2—Qualitative Analysis.....	....	3
Chemistry, 2a .....	6	....
English, 1 .....	....	3
Civil Eng., 1—Surveying, Theory.....	....	2
Civil Eng., 2—Surveying, Field.....	3	....

## SECOND SEMESTER

Mathematics, 6—Analytical Geometry.....	....	5
Drawing, 5 .....	6	....
Chemistry, 3 .....	....	3
Chemistry, 3a .....	6	....
English, 1 .....	....	3
Civil Eng., 1.....	....	2
Civil Eng., 2.....	3	....

## Second Year

## FIRST SEMESTER

Physics, 1abc—Electricity and Heat.....	3	5
Physics, 4—Shop .....	3	....
Elect. Eng., 4—Steam Engineering.....	....	2
Civil Eng., 13—Materials.....	....	3
Mathematics, 8—Differential Calculus.....	....	3
Drawing, 6—Descriptive Geometry.....	3	1

## SECOND SEMESTER

Physics, 2abc—Mechanics and Light.....	3	5
Physics, 4—Shop .....	3	....
Elect. Eng., 5—Steam Engineering.....	....	2
Physics, 5—Electricity .....	....	2

	Lab. Hours.	Class Hours.
Mathematics, 8—Integral Calculus.....	...	3
Elect. Eng., 11—Workshop Mechanics.....	...	1
Physics, 5a—Physical Measurements.....	3	...

**Third Year****FIRST SEMESTER**

Elect. Eng., 1a—Direct Current Machinery.....	...	5
Physics, 6—Electrical Measurements.....	6	...
Civil Eng., 7, 8—Mechanics.....	...	5
Physics, 12—Thermodynamics .....	...	1
Elect. Eng., 6—Excursions .....	2	...
Physics, 10—Illumination .....	...	3

**SECOND SEMESTER**

Elect. Eng., 1b .....	...	5
Elect. Eng., 2—Dynamo Laboratory.....	6	...
Civil Eng., 7, 8—Mechanics.....	...	5
Elect. Eng., 6—Excursions.....	2	...
Drawing, 7—Machine Design .....	...	3

**Fourth Year****FIRST SEMESTER**

Elect. Eng., 3a—Alternating Currents .....	...	5
Elect. Eng., 7—Dyn. Lab. A. C. Mach.....	6	...
Elect. Eng., 8—Theory of Electricity.....	...	2
Elect. Eng., 12—Thesis.....	3	...
Economics, 1 .....	...	3
Elect. Eng., 6—Excursions.....	2	...

**SECOND SEMESTER**

Elect. Eng., 3b—Alternating Currents .....	...	3
Elect. Eng., 3—Electric Railroads .....	...	2
Elect. Eng., 7—A. C. Lab. ....	6	...
Civil Eng., 9—Hydraulics .....	...	3
Elect. Eng., 12—Thesis.....	3	...
Economics, 1 .....	...	3
Elect. Eng., 6—Excursions .....	2	...
Elect. Eng., 10—Transmission .....	...	2



**COURSES IN ELECTRICAL ENGINEERING**

**1a. Dynamo Electric Machinery.** This course comprises a study of the theory and operation of direct-current generators and motors. Text: "Elements of Electrical Engineering," Vol. 1, by Franklin and Esty. Five units; first semester. (Nye.)

**1b. Dynamo Electric Machinery.** This course comprises a study of electric distribution and lighting and the elementary principles of Alternating Currents. Five units; second semester. (Nye.)

**2. Dynamo Laboratory.** Study is made of the performance of direct-current machines by means of their characteristic curves; efficiency, regulation, and heat tests are run; and various methods of operating generators and motors and their auxiliary control apparatus are studied. Junior year. Six hours, two units; second semester. (Montgomery.)

**3a. Alternating Currents.** A mathematical study of the theory and applications to modern machinery. Study of text and lectures. Text: "Alternating Currents and Alternating Current Machinery," by Jackson. Five units; first semester. (Montgomery.)

**3b. Alternating Currents.** Continuation of 3a. Three units; second semester. (Montgomery.)

**4. Steam Engineering.** Boilers, combustion, fuels, laws of gases and heat-conduction, corrosion and scale, testing, flow of steam in pipes, etc. Practical apparatus as used in steam power plants. Two units; first semester. (Montgomery.)

**5. Steam Engineering.** A study of various types of steam turbines and steam engines, indicator cards, valve motions and diagrams, multiple expansion, design of parts. General layout of plants. Two units; second semester. (Nye.)

**6. Excursions.** Trips to various power plants and factories with a view to observing methods and processes. Written reports required of students.

**7. Dynamo Laboratory.** Tests and study of alternating current apparatus. Senior year. Six hours, two units; throughout the year. (Montgomery.)

**8. Theory of Electricity.** The electrical units and their dimensions; laws of circuits; theories of electric conduction in solids, gases, and electrolytes; valve actions; etc. Two units; first semester. (Nye.)

**9. Electric Railroads.** Railway engineering, power-plant engineering, water-power installation, economics of electrical engineering, etc. Two units; second semester. (Montgomery.)

**10. Transmission and Station Equipment.** A study of the commercial problems of electric-power generation and distribution, and of standard polyphase machinery. Two units; second semester. (Nye.)

**11. Workshop Mechanics.** A consideration of the materials of machine construction, of the methods of working them, and of workshop appliances. Lectures, no credits, but required of all graduates in Electrical Engineering. (Montgomery.)

**12. Thesis.** An original investigation and study of some special problem.

**Note.**—For courses in Electrical Engineering that can be accepted toward the degree of Bachelor of Arts, see Engineering Courses in Arts.

## **MINING AND CHEMICAL ENGINEERING**

**LAIRD J. STABLER, L. S. WEATHERBY, Professors**

The University is at present offering two years of the course in Mining and Chemical Engineering. The work, as outlined, gives thorough training in the fundamental subjects of mathematics, chemistry, physics, drawing, and the elements of engineering. The foundation laid in the two years prepares the student to enter any of the good mining colleges, and complete the work of the Junior and Senior years, specializing in Mining and Metallurgy.

Students who desire to complete their full course at this University may, by satisfying the requirements in Liberal Arts, select their further courses from the Department of Chemistry, and from the engineering courses for which credit is given in Liberal Arts, and be graduated as majors in Chemistry.

### **Courses in Mining or Chemical Engineering**

#### **Freshman Year**

	First Semester	Second Semester
English, 1 .....	3	3
Mathematics, 4, 5, 6.....	5	5
Chemistry, 2, 2a, 3, 3a.....	5	5
Civil Engineering, 1.....	2	2
Civil Engineering, 2 (Field Work) .....	2	2
Drawing, 4, 5.....	2	2

#### **Sophomore Year**

Mathematics, 8, 9—Calculus.....	3	3
Geology, 3,—Mineralogy .....	2	2
Eng. Drawing, 3—Descriptive Geometry.....	1	1
Drawing, 6 .....	3	3
Physics, 1a; 1b, 1c, 2a, 2b, 2c.....	6	6
Chemistry, 4, 8.....	4	4

**Note.**—For courses in Mining and Chemical Engineering that can be accepted toward the degree of Bachelor of Arts, see **Engineering Courses in Arts.**

# GENERAL INFORMATION

The College of Liberal Arts of the University of Southern California is situated in Los Angeles, about three and one-half miles southwest from the business section of the city. The College buildings are accessible by three lines of street cars, the West Jefferson Street, the University, and the Pacific Electric lines. This is one of the most beautiful and rapidly growing residence sections of Los Angeles.

## EQUIPMENT

**The Library** is housed in the main building of the University. The reference room contains the general reference books, the bound magazines, and a carefully selected list of current periodicals. The stack room contains the circulating books. There are also three large study-rooms, two on the main floor in the North Annex, the other for the preparatory students on the second floor.

All officers, students, and graduates of the University have free access to the library and may draw books for home use. The shelves are open to members of the Faculty and, upon recommendation of their major professors, to students engaged in advanced work.

The Library contains over fifteen thousand volumes, exclusive of unbound pamphlets, and also the Dean Cochran Memorial Library of over two thousand volumes placed in the University by his son, George I. Cochran. Many new volumes are added each year to meet the demands of the various departments.

The Library is open five days in the week from 7:50 A. M. to 5:30 P. M., and from 7:00 to 9:00 P. M.; on Saturdays from 8:30 A. M. to 3:30 P. M.

The Los Angeles Public Library of over 150,000 volumes is a most valuable supplement to the facilities offered by the University Library, and is open to all students. The Univer-

sity Library is a depository of the Public Library, and books as needed are brought from the Public Library for the use of the students. Books for graduate work are borrowed from public and college libraries in the state through the Los Angeles County Free Library.

**The Museum** contains an extensive collection of specimens in mineralogy and geology, which have been accumulated during the past years by donation and purchase. This collection has been classified and arranged so as to illustrate the daily work of the classes in geology and mineralogy. The Museum contains the collection purchased from Dr. Stephen Bowers; and those donated by the late Rev. C. R. Pattee, Mrs. Mary Wright, and Professor Dickinson. These private collections are especially rich in archaeological and conchological material.

All who donate specimens to this department will receive due acknowledgment on the labels.

**Physical and Electrical Engineering Laboratories.** The Departments of Physics and Electrical Engineering occupy nine rooms on the first floor of the Main Building and the Science Hall. These have been planned and equipped exclusively for the department and are well suited to the purposes for which they are used. Ample laboratory space is provided and equipped for experimental work in elementary and advanced physics, optics, photometry, electrical measurements, and direct and alternating currents.

The apparatus and instruments are modern and of the best quality. The equipment in Mechanics includes a number of excellent precision pieces by Gaertner; in Heat, apparatus by Pye of Cambridge, England; in Light, interferometer, spectrometers, prisms, gratings, etc., by Gaertner, Wilson, and Kohl.

In Electricity the equipment is especially complete. Special mention may be made of standard resistances, postoffice boxes, slidewire bridges, potentiometer by Leeds and Northrup, portable galvanometers, type H galvanometers, Thompson dynamometer, tangent galvanometers, standards of self-induction, sechometer, permeameter, and variable condenser.



There is also an unusually complete assortment of indicating meters for both direct and alternating currents, including voltmeters, ammeters, and wattmeters of various ranges, mostly made by Weston; also Whitney hot wire, Wagner induction, Hoyt torsion head, Ayrton and Perry plunger type, General Electric magnetic vane, and S. H. frequency.

The dynamo room is equipped with a number of direct and alternating current machines of various types. There is a 7.5-Kw. General Electric revolving-field alternator with special winding for various phase and voltage connections. This machine has, also, three extra rotors so that it may be run as an induction motor with squirrel-cage rotor, with an external resistance rotor, or with an internal resistance rotor. It may also be run as a synchronous motor.

The 7.5-Kw. Westinghouse double current generator may be used as a 1, 2, or 3-phase alternator, or as a 125-volt D. C. generator, or as a rotary converter.

In addition to these machines there are, also, a 1.5-Kw. Crocker-Wheeler generator, a 1.5-Kw. Edison D. C. generator, an 800-watt Westinghouse D. C. generator, a 7.5-Kw. Fairbanks-Morse 125-volt D. C. generator, Westinghouse 1 and 5-horsepower induction motors, and General Electric 1 and 3-horsepower induction motors, the latter with the phases wound in different colors and brought out to a terminal board so that various connections may be made.

The necessary rheostats, water-rheostats, transformers, controllers, and compensators are provided. Circuits run to the electrical measurements room and lecture room, and one of the motor generator sets is arranged for operation in the lecture room for demonstration purposes. A stereopticon with slides showing modern electric installations is provided.

The photometer room is equipped with a Schmidt and Haensch station-photometer of the Lummer-Brodhun contrast type, with accessories; and also with a Sharp-Millar portable photometer, standard lamps, color screen, etc.

The wireless equipment, built almost entirely by students of the department, contains one 2-Kw. high-voltage transformer, a high-capacity oscillation transformer, a high potential con-

denser (three units), and a break-key for sending. The unit receiving set consists of six mineral detectors, two Fleming audions, a loose-coupled experimental detector, a tuning transformer, and two latest type condensers. There is also a receiving set, loose-coupled.

In the machine shop are provided tools for repair work and training in shop practice. These include a twelve-inch engine lathe, a speed lathe, a drill press, taps, dies and drills, and bench tools for wood and metal work.

The Library contains a large number of reference books on many special subjects in Electrical Engineering and General Physics.

**The Biological Equipment.** The entire second floor of the new north wing of the main building is devoted to the biological laboratories and lecture room. The four laboratories with their 110 feet of desks facing immediately to the north, are so planned that each student has abundant light. Each student is supplied with two drawers and a microscope locker, each with Craig combination-locks. Specifically, the equipment of the four laboratories is as follows:

**The Zoological Laboratory,** 34x35 feet, contains forty-seven single desks and a large demonstration table 4x11 feet, with drawers and cupboards on each side for supplies. The laboratory is provided with an aquarium, a drip for keeping live specimens, glass cases for books, reagents and specimens, etc. Each student is furnished a compound microscope, BA 2 or BB2, dissecting instruments, and the necessary materials for dissection and study.

A Bausch and Lomb physician's type of microscope has been presented to the department by Mrs. Scherer in memory of her husband, the late Dr. Luther D. Scherer. The instrument is provided with a complete set of lenses and accessories as follows: 1-12 inch oil-immersion objective,  $\frac{1}{8}$  inch objective with compensating collar, and  $\frac{3}{4}$  inch objective, two eye pieces, substage condenser, stage micrometer, eye-piece micrometer and other accessories.

**The Botanical Laboratory** is thirty by forty-five feet. It contains forty-eight single desks with drawers and lockers, and Craig combination-locks for each; a large demonstration table; cases for herbarium specimens, books, and supplies; blackboards, sinks, aquarium, and drip. A compound microscope, dissecting instruments, and materials for study are furnished each student.

For the study of Plant Physiology the laboratory is very well equipped. This equipment consists of recently improved types of apparatus for experimental work, and includes the Cambridge Improved Auxanometer, which is self-recording; Ganong's Clinostat, Cambridge Circumnutationometer, Detmer's Gas Diffusion Apparatus, Pfeffer's Gas Apparatus, Oel's Geotropic Chambers, Freas' Osmometer, Pfeffer's Photosynthometer, Cambridge Photosynthoscope, Ganong's Potometer, Cambridge Respirator, several Manometers, a self-recording Transpirometer, and a number of other pieces of apparatus for working out the processes of the living plant. For research work in Botany the latest improved microscopes with oil-immersion objectives, camera lucida, warm temperature stage, micrometers, and other valuable accessories are provided.

The Library contains a large number of books and magazines on Botany and the latest contributions to Botanical literature.

**The Laboratory for Bacteriology and Physiology** is 29x46 feet, facing the north. It is supplied with autoclave, Arnold, and hot-air sterilizers, incubators, glassware, and all other necessary equipment for work in bacteriology. There are thirty-one single desks in this laboratory, a large demonstration table, two hoods and a cooling chamber, a sink, a tank, tables, cupboards, and a case of reagents and supplies. All the necessary materials, apparatus and instruments, including BB-8 Bausch and Lomb microscopes, are furnished the student. For Physiology the laboratory is supplied with the reagents and apparatus necessary for successful laboratory work, such as microscope, haemocytometer, dissecting instruments, etc. A complete set of the Harvard Physiological

apparatus has been added. For Histology and Embryology the student is supplied with BB-8 microscope and has the use of the Minot automatic rotary microtome, Bausch and Lomb's automatic laboratory microtome, and all reagents necessary to carry on successful work.

**The Biological Research Laboratory**, 15x17 feet, adjoins the office of the department, which is also 15x17 feet. The equipment of these rooms is such as adapts them to advanced work along special lines. The best microscopes of German and American make are available, including Bausch and Lomb, CC-8 Zeiss IIa, with anchromatic and a set of apo-chromatic objectives with compensating eye-pieces. Other microscopes of the Leitz and Spencer types, imbedding baths, centrifuge, camera, and numerous microscope accessories and instruments are provided.

**The Biological Lecture Room** is 32x36 feet with raised seats. It has a seating capacity of about two hundred and is provided with skylight and fitted with screens for darkening to adapt it to the use of the electric projection apparatus and stereopticon that form part of the equipment. The lecture desk, which is fitted with drawers and cupboards, can be adjusted instantly for gas or water for demonstration purposes. This room, as well as all others, is well supplied with electric lights.

The wide halls have been provided with glass cases in which are placed a large collection of birds, mollusks, and alcoholic specimens for demonstration and study. The collection of mollusks is very complete, representing over eighteen thousand specimens.

**The Marine Biological Station of the University of Southern California** is housed in the aquarium and auditorium buildings at Venice. The research laboratory has places for eight investigators, and the combined laboratory and lecture room for the summer course in marine biology will accommodate forty students. In the large aquarium room there are forty



aquaria with sides of plate glass and one large central concrete basin. A library and a reference collection of the local fauna and flora are being established.

The Venice pier and breakwater have been made a biological reservation by a special act of the Venice city trustees. Here are colonies of abalones and other animals brought from a distance for study and experimentation. A large live box, built of cement, is suspended near the breakwater and can be raised or lowered by block and tackle. One and one-half miles of canal, with water of lower salinity than the neighboring sea, give opportunity for acclimatization experiments.

In the Pacific Ocean the immediate field of investigation embraces the Santa Barbara Islands, extending from San Clemente, eighty miles to the south, to San Miguel, one hundred and thirty miles to the west. The inshore waters are shallow, reaching the one hundred fathom line ten miles directly seaward to the southwest, a depth of three hundred and fifty fathoms about five miles beyond. At sixty miles from Venice, somewhat to the west of Santa Barbara Island, lies an oval basin twenty miles long and ten miles in width, having a depth of eight hundred and thirty fathoms. The **Anton Dohrn**, a motor sloop of thirty-five feet over all and of ten feet beam, has been built for the exploration of these waters.

**The Chemical Laboratories** occupy the building in the southern portion of the campus. The laboratories for general and qualitative chemistry will accommodate two hundred students; that for quantitative chemistry forty students; that for organic chemistry twenty-five students. The laboratories are thoroughly equipped with modern laboratory tables, water, gas, apparatus and chemicals; they contain a large number of hoods and all of the conveniences of a modern laboratory. The balance room is a separate room, well lighted and equipped with twelve fine analytical balances. The store-room is supplied with a large quantity of apparatus and chemicals of the best make. A special research laboratory



accommodating twenty-five students is thoroughly equipped with storage batteries for electro-chemistry, and with combustion and special apparatus for determining molecular weight. Another laboratory is equipped for investigations on oil and gas. The equipment consists of still, hydrometers, viscometers, Atwater's bomb calorimeters for heat determination, Junker's patent gas-calorimeters, Hempel's gas apparatus, Elliott's sulphur apparatus, and a thermo-electric pyrometer. There are also four additional research laboratories.

**The Assay and Metallurgical Laboratory** occupies a large room in the Chemistry Building. The equipment consists of rock crushers, ore grinders of several kinds, and amalgamating fans, all driven by electricity. The furnaces are of the latest type, using gas for fuel. The equipment includes apparatus for concentration and amalgamation tests, as well as a complete cyanide and chlorination plant. Special facilities are afforded for the electrolytic reduction processes. The laboratory is modern in every detail.

**The Laboratories for Geology, Mineralogy, and Soils.** The collections of specimens in geology and mineralogy have accumulated during the past years, and have been classified and arranged so as to illustrate the daily work of the classes in these subjects. Among the collections are those donated by the Rev. C. R. Pattee, Mrs. Mary Wright, and Professor Dickinson, and the one purchased from Dr. Stephen Bowers. A collection of one hundred type soils of the state gives opportunity for comparison and study. Laboratory work is carried on in making relief maps to scale to illustrate the geology, physiography, soils, and mineral industries. A laboratory is being equipped for the physical analysis and identification of soils. The Library contains a large and valuable collection of reference works on the geology, mineralogy, physiography, soils and climate of California. The collection loaned by Professor Bailey includes a complete set of the U. S. geologic folios and soil maps of the State; bulletins on the geology, oil, and mining industries; and many maps, charts, photographs, and lantern slides.

## ATHLETICS AND PHYSICAL TRAINING

The Faculty of the College of Liberal Arts, recognizing that physical training is both hygienic and educative, desires to encourage every reasonable effort in the direction of physical development consistent with well-rounded manhood and womanhood. On its hygienic side physical training should aid the body in all its functions, develop a symmetrical form, correct deformity as far as possible, and afford recreation. In its educative function it should afford the discipline necessary for self-control, both mental and moral. Athletic sports are encouraged for their value in developing the body, and in furnishing a means of pleasant recreation as well as a source of social and ethical culture.

**Gymnasium and Athletic Grounds.** The gymnasium, the four tennis courts, the basketball court, the inclosed athletic field, with its quarter-mile cinder path, and the bleachers with thirty-five hundred sittings, furnish ample facilities for physical training and outdoor sports. In addition to this the University has free use of the limitless facilities provided by the immense athletic field of Exposition Park, situated just three blocks south of the University and practically forming a part of the campus.

The gymnasium has been fitted with appliances for the proper development of the body. The necessary apparatus of the newest and most approved designs has been provided. The students have all the advantages of the gymnasium, with baths, lockers, and dressing room accommodations. Men and women occupy the building at different periods of the day, and have baths, locker rooms, and dressing rooms in separate wings of the gymnasium building.

A complete equipment is provided for each form of exercise. Galleries will afford audience room for special gymnastic exercises when such are open to the public.

Each student, on entering the department, undergoes a thorough physical examination, in order that his or her physical condition may be known, and suitable exercise prescribed. Various strength tests and measurements are given; the

heart, lungs, sight, and hearing are examined; and the utmost caution is used in the advice given regarding individual exercise. One examination during each semester is required, the latter demonstrating any improvement or change in the student's physical condition. Anthropometric cards and charts are plotted for students when desired.

All athletic and team contests are under the close supervision of the director, and no student is permitted to compete in games or contests whose physical examination shows that he or she is unfit.

Any person who desires to enter athletic contests must attain a certain standard of scholarship before being permitted to participate.

### DEBATING

The University provides opportunity for all who wish to engage in debating. During the last season—1913-1914—the University schedule included Occidental College, Whittier College, Pomona College, Northwestern University College of Law, Brigham Young University, Oklahoma University, the University of North Dakota, and the Los Angeles Junior College. The schedule for this season includes Idaho University, Pomona College, Occidental College, Brigham Young University, Denver University, Oklahoma University and the University of North Dakota. The present season will give opportunity for the training of thirty men in actual contests. In addition the Freshman teams meet Pomona College Freshmen, Throop College, and Whittier College for development of Varsity material. There is also a Woman's Debate with Occidental College. An equally extensive schedule is being arranged for 1915-1916.

Extensive try-outs are conducted early each academic year, and prizes totaling \$90.00 are offered under the auspices of the "Speakers' Club" to the eight contestants ranking highest in "sincere and effective speaking." These men, together with others properly qualifying, represent the University in regular intercollegiate debate. (See under "Prizes.")

## RELIGIOUS PRIVILEGES

The moral atmosphere surrounding the student is exceptionally good. The Young Men's Christian Association and the Young Women's Christian Association are active and effective in social and religious life. The Y. W. C. A. meets every Wednesday at 9:50 A. M. in East Hall. The Y. M. C. A. meets every Wednesday at 9:50 A. M. in the Chapel. A General Assembly is held for all college students on Tuesday and Thursday at 9:50 A. M. in the Chapel. In addition to the chapel services, courses of special addresses are delivered from time to time. A student prayer-meeting is held every Thursday, at 7 P. M. These privileges constitute a good Christian atmosphere in which to lay the foundation of character. Students are expected to attend some church each Sabbath, and are advised to join some Sunday class for the study of the Bible.

The University Methodist Episcopal Church is located near the campus, and is one of the most prosperous churches in the city. The Baptists and Presbyterians, and other denominations, also have churches in the near vicinity. These advantages, together with fine public school privileges, make the University section of the city a very desirable place for the residence of families seeking educational opportunities.

## HOUSING

Requirements as to the housing of students living away from home are in the hands of a special Faculty Committee. These must be complied with before the student may be considered settled.

## THE WOMEN'S HALLS

Under the management of the Women's Club, dormitories are provided for young women, where every home comfort and protection is assured to those coming from a distance.

Women students who are not to live at home (that is, with parents or legal guardians) are required to live in one of the women's halls. Exceptions, either from lack of room or other



reason, must be approved by parents and by the University, and such approval is to be secured before lodgings are engaged.

Room and board (except luncheon Monday to Friday) in the Women's Halls, cost one hundred and ten dollars (\$110.00) per semester, payable in advance. A cash deposit of ten dollars (\$10.00) is required for the reservation of a room. Students are expected to supply their own bed linen.

A student vacating a room before the close of the semester will be charged for room and board until the end of the semester, or until the vacancy has been filled by an incoming student. Therefore, for the benefit of the outgoing student, notice of an intention to withdraw should be given at the earliest possible moment.

No lunch is served at the Women's Hall on school days. All students may secure luncheon at the University Cafeteria on the campus, the expense of which is not included in the above-mentioned fee.

Further inquiries and all applications for rooms should be addressed to Mrs. H. Trowbridge, 1110 West Washington Street, Los Angeles.

### THE WOMEN'S CLUB

A society of ladies interested in the welfare of the students was organized ten years ago under the name of Women's Auxiliary to supplement in all practical ways the plans of the University authorities for the comfort and convenience of the student body. The alertness and efficiency of this organization is worthy of all commendation. The reception room and the girls' rest room were furnished by their efforts; the women's dormitories are under their supervision; and the University Cafeteria for students and Faculty, under their judicious management, is a great success.

There are about one hundred members, and a meeting is held on the last Tuesday afternoon of each month. Mothers of students and ladies interested in the University are cordially invited to become members of this growing organiza-



tion. Last year the Women's Auxiliary was reorganized as the Women's Club of the University and joined both the State and National Federations of Women's Clubs. In December, 1914, an Alumnae Department was formed, for the purpose of keeping the interest of the women graduates in the affairs of the University; of supplying a bond of unity for the women now taking graduate work, and of furthering in all possible ways the interests of the University. Only those women who have graduated are eligible to full membership, but any woman who has taken one year's work at the University may become an associate member.

The officers of the Women's Club make the following statement of their chief purpose:

"The present aim of the Club is the erection of a large hall of residence, in place of the rented buildings now being used. The plan is to build around a garden-court, on which all rooms and sleeping porches will open. In this project the Club seeks to enlist the co-operation of every one interested in higher education in the South, irrespective of denominational affiliation."

## **STUDENT ORGANIZATIONS AND PUBLICATIONS**

There are four literary societies connected with the College of Liberal Arts, the Aristotelian and Comitia for men, and the Athena and Clionian for women. Of these, the Aristotelian and the Athena societies, which date back to the early years of the University, have large and well-furnished halls in which to hold their meetings. All of the societies are in flourishing condition. Once a week each conducts programs consisting of debates, papers, readings, music, discussions on current topics of vital interest, and drill in parliamentary law. Periodically all the societies meet in joint assembly under the auspices of the Civic League for the discussion of problems of civic interest and for the furthering of civic righteousness.

Among the students in the College of Liberal Arts are one national fraternity, two national sororities, six local fraternities, and four local sororities. The aggregate member-

ship is over two hundred. One of the noteworthy features of these societies is their spirit of good-fellowship with those members of the student body who have no such affiliations. The Greek letter societies are under the supervision of a special Faculty committee. A system of grading by the University authorities encourages them to attain a high standard of scholarship.

"The Daily Southern Californian" is a newspaper managed by a well-organized staff of undergraduates with the co-operation of the Faculty, and devoted to news articles and announcements of events of interest to the University, and to editorial discussion of moment to the student body. The editor-in-chief for the year 1914-1915 is Fred Aden.

"El Rodeo" is the title of the college annual of descriptive articles, photographs, and cartoons, including all phases of the life in the College of Liberal Arts, and produced by the Junior class of each year.

### FEES AND EXPENSES

Tuition, a semester, payable in advance.....	\$46.00
(Special rates will be made to students registering for less than ten hours. <b>Five dollars</b> of the above is <b>registration fee</b> and is not refundable.)	
Diploma Fee, payable 30 days before graduation.....	5.00
Laboratory Fees, per semester:	
Assaying.....(to be arranged with Treasurer)	
Biology, each course requiring laboratory work.....	4.00
Chemistry .....	8.00
Electrical Engineering, two- and seven-dynamo laboratories, each .....	8.00
Philosophy:	
Course 8, Psychology Laboratory.....	2.00
Physics:	
Courses 1 and 2, each.....	4.00
Course 3, mechanics .....	4.00 to 6.00
Course 4, shop .....	6.00
Course 6, electrical measurements .....	6.00
Surveying, field work.....one unit, \$2.50; two units	4.00

Students in Chemistry deposit a breakage fee of \$7.00, which, after deducting the cost of goods broken, will be refunded at the close of the year.

Room and board (except luncheon Monday to Friday) in the Women's Halls, one hundred and ten dollars (\$110.00) per semester, payable in advance. A cash deposit of \$10.00 required for the reservation of a room (not refundable).

Ministers in the regular work of any evangelical denomination may have tuition for their children at half rates.

A discount of ten per cent of the tuition is allowed where two or more students enter from the same family.

A portion of the tuition may be refunded in case a student is compelled to cancel his registration on account of sickness. No refund will be made for an absence of less than half a semester.

Charges for **Graduate work** are made according to the above schedule, except that students who have received their Bachelor's degree from the University of Southern California are granted twenty-five per cent discount.

**Scholarships, special rates, and discounts do not apply on registration and laboratory fees.**

### **Living Expenses**

The Hodge Hall Boarding Club furnishes board for young men at very reasonable rates. Information concerning membership in this club can be obtained upon application.

Board and furnished rooms can be secured in private families at from five to seven dollars per week. Furnished rooms, accommodating two students, cost from eight to twelve dollars per month.

Other expenses incident to college life vary with the habits and circumstances of the student. They are not of necessity so great as to be burdensome to persons in moderate circumstances.

The Young Men's Christian Association conducts a free rental bureau for the benefit of all students and has all available rooms in the vicinity of the University campus listed and

on file. The Young Men's Christian Association and the Young Women's Christian Association also conduct an employment bureau for the purpose of aiding needy and worthy students who are desirous of earning a part of their expenses while in college. The presidents of these Associations will be glad to answer any requests for information addressed to them.

A number of students each year find it possible to earn enough while attending the University to pay their expenses for the year. However, the University recommends that a student provide himself with resources sufficient for the expenses of one semester before registering for full work.

### SCHOLARSHIPS

The following scholarships have been founded in the College of Liberal Arts. Others contemplate the establishment of prizes and scholarships, and it is earnestly hoped that soon a considerably larger number can be offered. Friends of the University can greatly add to its attractiveness in this way.

**The Hugh Johnston Scholarship** was founded by Mrs. Anna H. Johnston, of Pasadena, in memory of her deceased husband, and is for the benefit of needy students. Mrs. Johnston will name the incumbent when she desires; otherwise this will be done by the authorities of the University.

**The Spence Scholarship** was founded by the Hon. E. F. Spence in his lifetime, and is devoted to the use of needy students in the San Diego district, upon the recommendation of the District Superintendent of that district.

**The A. C. Hazzard Scholarship** is a thirty-year scholarship founded by Rev. A. C. Hazzard, of Whittier, for the benefit of students preparing for Christian work.

**The A. M. Peck Scholarship** was founded by A. M. Peck, of Compton.



**The Poplin Scholarship** was founded by F. L. Poplin, of Los Angeles. The incumbent is to be named by the founder.

**The Ontario Scholarship** is for the benefit of the Ontario High School.

**The Zana E. Stevens Scholarship** was founded by the Rev. F. G. H. Stevens, September 16th, 1907, in memory of Zana E. Stevens, nee Terpenning, of the class of 1901. This scholarship is to be filled by a member of the J. O. C. class of the First Methodist Episcopal Church of Santa Monica, of which Mrs. Stevens was the organizer and teacher. The incumbent is to be named by the founder when he so desires, otherwise by the District Superintendent of the Los Angeles district and the authorities of the University. In case no member of this J. O. C. class is eligible, the incumbent shall be chosen from any J. O. C. members who apply for same. In case none such apply, the incumbent shall be chosen from any female students who apply.

**The A. M. Hough Scholarship** was founded by Mrs. Anna G. Hough, May 7th, 1908, by the payment of one thousand dollars. This scholarship is to be perpetual, and is to be used to aid some student each year in the College of Liberal Arts who is preparing to enter the ministry of the Methodist Episcopal Church. In case no such student should apply, the President of the University is authorized to use the scholarship to benefit any worthy student needing such help.

**The George I. Cochran Scholarship** was founded by George I. Cochran, who names the student receiving the benefit.

**The Abbie Mills Scholarship** was founded by Miss Abbie Mills by the payment of \$1000. The scholarship is perpetual, the President to name the student receiving the benefit.

**The Marion McKinley Bovard Scholarship** was founded by Mrs. Anna Gould Hough as a memorial to the first President of the University. The sum of one thousand dollars paid makes the scholarship perpetual. The beneficiary must be selected from eligible relatives of the first President if



any such candidates apply; otherwise the President of the University may award the scholarship to any worthy student.

**The Helen Miller Gould Scholarship** was founded by Miss Helen Miller Gould by the payment of one thousand dollars. Children of missionaries are eligible for the use of this scholarship.

**The Isaac Sunderland Scholarship** was founded by Mrs. Kate Sunderland, September, 1912, by the payment of one thousand dollars. Mrs. Sunderland or some person designated by her selects the student to receive the benefit of the scholarship.

**The Fred W. Kelly Olympic Scholarship** was founded by the friends of Mr. Kelly under the leadership of "The Los Angeles Times" in recognition of the athletic victory won by Mr. Kelly at Stockholm, Sweden, July, 1912. He represented the University of Southern California at the International Olympic contests and won the first place in the one hundred and ten meter high-hurdle race, time, 15.1 seconds. The scholarship is perpetual.

**The Rhodes Scholarship.** Attention is called to the opportunities presented by the scholarships founded by the late Cecil Rhodes, of South Africa. Each of these is worth \$1500 per year for three years, the term to be spent at Oxford University. To be eligible to appointment candidates must pass a qualifying examination. Full particulars will be given on application to the Rhodes Scholarship Committee of the Faculty of Liberal Arts.

## PRIZES

**The Lottie Lane Prize**, established by Mrs. Charlotte A. Thompson as a memorial to a deceased daughter, is an elaborate gold medal to be presented each year at Commencement to that member of the graduating class who shall have maintained the highest general average in scholarship throughout the whole college course. Students who have taken more than four academic years to complete the

course, and those who have received credit for work done elsewhere than in this College, are not eligible for this prize. This medal was awarded in 1914 to Rofena Chambers.

**The Phi Alpha Fraternity Oratorical Prize** of twenty-five dollars is awarded annually for the best oration delivered in the local oratorical contest by an undergraduate. The first prize was awarded in 1914 to Earl Henry Haydock.

**The University Oratorical Prize** of a one-semester scholarship in the junior or senior year of the College of Liberal Arts (value, forty dollars) is offered to that student who represents the University in the annual Intercollegiate Oratorical Contest; and an additional one-semester scholarship in the junior or senior year is awarded if the said representative wins first place in the Intercollegiate Contest. The scholarship is not transferable.

**The Intercollegiate Prohibition Oratorical Contest Prize** of one semester in the junior or senior year of the College of Liberal Arts (value, forty-six dollars) is offered to that student who represents the University in the annual Intercollegiate Prohibition Oratorical Contest; and an additional one-semester scholarship in the junior or senior year is awarded if the said representative wins first place in the Intercollegiate Prohibition Contest. The scholarship is not transferable.

**Debating Prizes.** Prizes amounting to a total of \$90.00 are offered to the eight contestants ranking highest in the annual series of debating try-outs, as follows: First prize, gold medal and \$15.00; second, silver medal and \$10.00; third, \$15.00; fourth, \$10.00; fifth, \$10.00; sixth, \$5.00; seventh, \$5.00; eighth, \$5.00.

## GIFTS TO THE UNIVERSITY

**The Hough Fund.** This is a fund of \$85,000 given by Rev. Asahel M. Hough, deceased, and his wife, Anna G. Hough, of Los Angeles. It is to be held by the University in perpetuity, and the income is to be used for current expenses of the College of Liberal Arts, or as the Board of Trustees may annually direct.

**The Hazzard Professorship.** Rev. A. C. Hazzard has given to the University property valued at \$30,000 for the endowment of a professorship in the English Bible.

**The Merryman Professorship.** Mr. T. D. Merryman has given to the University property valued at \$25,000 for the endowment of a professorship in Mathematics.

**The Hartupee Gift.** This gift consists of \$22,500.

**The Carnegie Gift.** This gift consists of \$25,000.

For further information address

UNIVERSITY OF SOUTHERN CALIFORNIA,  
Los Angeles, California.

# SUMMER SESSION

## Announcement

The annual Summer Session of the College of Liberal Arts of the University of Southern California will be held at the College of Liberal Arts on University Avenue, and at the Venice Marine Station, beginning Monday, June 28, and closing August 6, 1915.

Thursday, Friday and Saturday, June 24, 25 and 26, will be regular registration days at the Registrar's office, and when practicable, students are asked to register on these days.

## Visiting Professors

Ernest Carroll Moore, Professor of Education, Harvard University. He is well known to California teachers, having served for many years as Professor in the University of California, and for four years as Superintendent of Public Schools in Los Angeles. In the year 1910 he was called to the chair of Education in Yale University, and in 1913 received a similar appointment at Harvard University. For three years he was Dean of the Summer Session at Berkeley (1905-07).

Dr. Moore will conduct two classes, one on "Methods of Study and Teaching Others How to Study," another on "School Administration with Special Reference to Cities."

Carlos Bransby, Professor of Spanish, University of California. Dr. Bransby will conduct two classes, one being a reading course, the other his Teachers' Course in Conversation and Composition.

Further announcement of visiting professors, with description of their courses and other courses, will be made in the near future in the regular Summer Session Bulletin.

## Purpose of the Summer School

Courses offered in the Summer Session are designed to meet the needs of the following classes:

1. Undergraduates and graduates of schools and colleges.
2. Teachers, including those in grade schools, high schools, and other institutions of learning.
3. Persons desiring (as auditors) to attend courses without doing full or regular work, or taking examinations. Those enrolled as auditors do not receive University credits.

### Admission Requirements

The admission requirements to the Summer Session are, for all except those enrolled as auditors, uniform with the admission requirements to the regular sessions of the College of Liberal Arts. For details see pages 23-34 and 42.

### Credits

Six units of College credit represent full work for the Summer Session. In case an undergraduate student carries successfully more than a full course, before additional credit may be obtained application must be made to the Registrar, and such application must be favorably acted upon by the Scholarship Committee. By a recent ruling of the Graduate Council six units is, as a rule, the maximum credit for a graduate student in a single Summer Session.

All classes recite five times a week unless otherwise indicated. Five recitations or ten laboratory hours per week for the six weeks entitle the student to two units of credit.

### FEES AND EXPENSES

The payment of the Registration Fee entitles a student to enroll in as many of the courses as he is qualified to carry.

Registration fee .....\$20.00

Laboratory fees—

Chemistry ..... 5.00

(A breakage deposit of \$3.00 is also required. This is returned, less breakage.)

Botany ..... 3.00

Zoology ..... 3.00



DEPARTMENTS OF INSTRUCTION

SUMMER SESSION, 1914

AGRICULTURE

J. C. LILLARD, Professor

1. **Teacher's Course in Agriculture.** Twelve lectures and eighteen laboratory periods in the field. Three or five units.
- 3a. **Qualitative Analysis.** Non-metals. Two units.
4. **Quantitative Analysis.** Three or five units.
12. **Food Analysis.**

BIOLOGY

ANDREW C. LIFE, Associate Professor

Botany

1. **General Botany.** Four or six units.
2. **Field Botany and Taxonomy.** Two units.
4. **Plant Physiology.** Two or three units.
9. **Marine Algae.** Two or three units.

At the Venice Marine Station

ALBERT B. ULREY, Professor

PERCY S. BARNHART, Assistant Professor

Zoology

1. **General Zoology.** Six to eight units.
12. **Special Zoology.** Two to four units.

General Biology

8. **The Biological Survey.** Two to four units.
10. **Research.** Two to six units.

**CHEMISTRY**

LAIRD J. STABLER, L. S. WEATHERBY, Professors

1. **General Inorganic Chemistry.** To be accompanied by course 1a. Three units.

1a. **General Inorganic Chemistry.** Two units.

1s. **Elementary Organic, Food, and Textile Chemistry.** To be accompanied by course 1s.a. Three units.

1s.a. **Elementary Organic, Food, and Textile Chemistry.** Two units.

2a. **Qualitative Analysis. Metals.** Two units.

3a. **Qualitative Analysis. Non-metals.** Two units.

4. **Quantitative Analysis.** Three or five units.

**DRAWING.**

J. H. MONTGOMERY, Professor

1. **Elementary Mechanical Drawing.** Two units.

2. **Advanced Mechanical Drawing.** Two units.

4. **Machine Drawing.** Two units.

5. **Technic of Drawing.** Two units.

**ECONOMICS AND SOCIOLOGY**

ROCKWELL D. HUNT, EMORY S. BOGARDUS, Professors

**Economics**

1. **Principles of Economics.** Two units.

6a. **Trade Unionism.** Two units.

**Sociology**

2. **Principles of Sociology.** Two units.

3. **Immigration.** Two units.

## EDUCATION

THOMAS B. STOWELL, JEREMIAH B. LILLARD, Professors

3. Principles of Education. Three units.
11. Philosophy of Education. Three units.
22. Current Problems of Education. Two units.

## ENGLISH LANGUAGE AND LITERATURE

ALLISON GAW, PAUL SPENCER WOOD, JAMES MAIN DIXON,  
Professors

BENJAMIN F. STELTER, Associate Professor

3. Advanced Composition.
6. The Principles of Editing. One unit.
30. Survey of English Literature. First Semester.
- 35a. English Poetry Between 1798 and 1832.
- 36b. Advanced American Literature.
- 52a. Shakespeare.
61. Sir Walter Scott.
73. History of the Novel Previous to 1740.
74. Poetics.
- 74ss. Studies in Great Poems.
80. The Teaching of English.

## FRENCH

LAWRENCE M. RIDDLE, Professor

1. Elementary French. Five units.
2. Intermediate French. Three units.
3. Advanced French. Two units.

**GEOGRAPHY**

JAMES FRANKLIN CHAMBERLAIN, Professor

1. The Teaching of Geography.
2. The Geography of the United States.

**GERMAN**

BERTHA JACOBY-KIENLE, Associate Professor

MYRTLE EMILY BILES, Instructor

1. Beginning German. Three units.
- 2a. German Conversation. Two units.
- 4a. Upper German. Three units.
- S.S. Advanced German. Three units.
11. Teacher's Course. Two units.

**HISTORY**

ARLEY B. SHOW, ROCKWELL D. HUNT, Professors

7. History of the Middle Ages.
15. Pacific Slope History.
17. Teachers' Course in History.

**INTERNATIONAL CONCILIATION**

ROBERT C. ROOT, Professor

1. International Conciliation.

**MATHEMATICS.**

PAUL ARNOLD, Professor

HUGH WILLETT, Associate Professor

1. Theory of Algebra. Two or three units.
2. Solid and Spherical Geometry. Three units.
3. Trigonometry. Three units.

6. Plane Analytic Geometry. Three units.
7. Differential Calculus. Three units.
8. Integral Calculus. Three units.
10. Teachers' Course. Two units.

### MUSIC

GERTRUDE B. PARSONS, Director  
IDA E. BACH, Assistant

1. Practical Methods and Choice of Materials.
2. Rhythmics.
3. Chorus Work and Song Interpretation.
4. Harmony I.
5. Ear Training.

#### Advanced Training.

1. Ear Training.
2. Sight Singing.
3. Harmony II.
4. Chorus Work and Song Interpretation.

#### Weekly Round Tables

### PHYSICS

ARTHUR W. NYE, Professor

1. General Physics, Mechanics, and Heat. Three units.
2. General Physics, Electricity, and Light. Three units.
3. General Physics, Mechanics, and Heat. One unit.
4. General Physics, Electricity, and Light.
5. Electrical Measurements. One or two units.



6. **Advanced Laboratory.** One or two units.
7. **Radio-activity and Passage of Electricity Through Gases.** Two units.

### PHILOSOPHY

FESTUS E. OWEN, Professor

4. **The Psychology of Thinking.**
5. **Abnormal Psychology.**
40. **Elementary Logic.**

### PHYSICAL EDUCATION

EDNA A. COCKS, Physical Director for Women

1. **General Gymnastics.** One unit.
4. **Outdoor Sports.** One unit.
5. **Hygiene and First Aid to Injured.** Two units.
6. **Normal Course.** Two units.

### ORATORY.

LEONARD G. NATTKEMPER, Professor

2. **Voice Building.**
3. **Interpretations.**
6. **Extemporaneous Speaking.**
- (A) **Declamation and Extempore.**
4. **A Study of Lyric Poems.**

# *The* COLLEGE *of* PHYSICIANS *and* SURGEONS

## FOREWORD

The University of Southern California, in establishing and building up the various professional colleges, was one of the first institutions in the West to broaden the scope of the curriculum in its medical department. In 1885, when the medical department of this University was founded, the Trustees placed themselves on record for higher medical education, declaring for a three-year course, which was the exception at that time, and since then this institution has constantly striven to place its medical department upon the highest plane of efficiency. The Alumni of the Medical Department of this University include many of the leading physicians and surgeons of this country.

The College of Physicians and Surgeons of Los Angeles, became an integral part of the University of Southern California August 11, 1909, thus becoming its medical department, its Faculty believing that better work could be done under the auspices of a university, where the university spirit might be infused into the various branches of its medical course. The wisdom of this union is made manifest by the work now being done in all departments of the medical curriculum.

The government of the College of Physicians and Surgeons is vested in the Board of Trustees of the University and in the Judicial Council and Senior Faculty of the Medical Department, as provided in the articles of incorporation of the University.

## Environment

The advantages derived by the students of the University of Southern California from the fact that it is situated in Los Angeles, the metropolis of Southern California, have already been noted.

The population of Los Angeles is essentially cosmopolitan. People in the different walks of life, from all quarters of the globe, are to be found here, and we have therefore an abundance of clinical material, which this college utilizes to the very best advantage.

## FACILITIES FOR INSTRUCTION

### The College Building

Located at 516 East Washington Street, in a charming section of Los Angeles, surrounded by splendid homes and easy of access, not on the outskirts of the city nor yet too near the business center, is to be found the modern and commodious building of the College of Physicians and Surgeons. It was designed and erected especially for our use, and contains all of the elements of a modern and thoroughly up-to-date college hall. It is a three-story structure with basement, is built of brick with stone facings, and is practically fireproof.

In the basement are located the instantaneous water-heating system; a furnace that conveys heated air to each department, with apparatus for forcing cool and pure air into each room when needed; storage tanks for anatomical material; a receiving and preparation room for the same; and a shower bath for the use of students.

On the first floor are located the college offices, the library and reading room; the large chemical laboratory; a laboratory for physiology, pharmacodynamics, and toxicology, with all modern apparatus and appliances; clinical rooms for each department of medicine and surgery, and for specialties; the operating room, sterilizing room, clinic waiting room, and drug room; and a completely equipped clinical laboratory for the use of the clinic department.

Located on the second floor are the Pathological, Bacteriological, Histological, and Embryological laboratories, which have east, north and west exposures affording an abundance of light, and are well heated and thoroughly

equipped with all modern appliances. Glass-covered tables are arranged around the north and west exposures, and all the latest apparatus has been installed. Each student is supplied with a microscope (Bausch and Lomb), with oil-immersion lens, for use when required. Private laboratories form a part of the main laboratory hall, and afford opportunity for special private research. On the second floor are also located one large amphitheatre, furnished with two hundred modern opera chairs; one lecture room, also with opera chairs; an electro-therapeutic room, equipped with static machine, X-ray apparatus, and all necessary appliances; and a chart room, supplied with imported charts, manikins, etc., arranged for use in various illustrative and didactic work. There are to be found upon the shelves of the College Museum many rare and valuable pathological specimens. A room on the second floor has been set apart and furnished for the exclusive use of women students.

On the third floor is located the **Anatomical Department**, complete in every detail. Opening into the main Anatomical Department, by sliding doors, is the Anatomical Amphitheatre, seated with opera chairs and equipped with a revolving table, so arranged that the most delicate operations and demonstrations upon the cadaver can be witnessed.

Much new apparatus is constantly being added in all departments, stereopticon illustrations being one of the leading features in our primary departments. No expense has been spared to equip this college adequately for the teaching of medicine and surgery and for the comfort and the health of teachers and students.

### **Laboratory Equipment**

**Division I. Anatomy, Histology, and Embryology.** The **Anatomical Laboratory** is admirably adapted to the purpose of teaching practical anatomy. The room is on the top floor of the college building and is well lighted, well ventilated, and kept in a thoroughly sanitary condition. It is provided with every facility for giving students a detailed knowledge of anatomical structures. The dissecting room is supplied with

excellent light through extensive sky-lights, supplemented by an excellent electric equipment. In addition to abundant material for dissection, the Anatomical Laboratory displays a large and very valuable collection of dissected parts, which have been especially prepared for their teaching value and not as a mere collection of rare specimens. On the same floor is situated a thoroughly equipped bone-library, which consists of articulated and numerous disarticulated human bones, perfectly bleached. From this bone-library, lateral halves of the human skeleton are loaned to the student, free of charge, for study at home.

Across the hall from the bone-library, special private laboratories are provided for the professor and assistants, for research work in General Anatomy, including Histology, Embryology, and Neural Anatomy.

The laboratory is equipped with the most modern scientific appliances, such as dissecting microscopes, a compound microscope of the best foreign make, a precision microtome, a rotary microtome for serial sections, and a number of other indispensable instruments. In connection with this laboratory a Chart and Model Room is maintained. This contains many imported papier maché models of organs of the special senses, particularly the brain and the spinal cord, and also about one hundred anatomical charts (20x45 inches) made from actual dissections and painted by one of the best anatomical artists of the East.

The **Histological and Embryological Departments**, which are a part of the Anatomical Section, are thoroughly equipped with all modern and up-to-date apparatus necessary for the teaching and conducting of these correlative branches. This department is abundantly supplied with high-grade microscopes, with Abbe condenser, diaphragm attachments and oil-immersion lens, paraffin baths, the latest modern microtomes for celloidin and paraffin sections, projectoscopes, injection apparatus, charts, drawings, and a vast collection of slides of tissue and organs, together with all necessary apparatus for bringing these two important departments up to the very highest state of efficiency.



**Division II. Chemistry, Physiology, and Pharmacodynamics.** These departments are especially well equipped. In the **Physiological Department** there is provided apparatus for blood work, spectroscopes, compound microscopes, kymographs, sphygmographs, respirometers, chronograph and stimulating apparatus, coils, batteries, cylinders and rheocords, moist chambers and all accessories for nerve work; heart levers, manometers, tonometers, etc., with accessories and all necessary apparatus for the study of capillary circulation; polariscopes, galvanometers, and mercury cups for gas analytical work, thermostats and incubators, perimeters, ophthalmometers and ophthalmoscope lenses; Galton whistles, etc.

The **Chemical Laboratories** are similarly well equipped with fume chambers, drying ovens, spectroscopes, Kjeldahl nitrogen apparatus, apparatus for milk analysis, and all other apparatus necessary for a complete Chemical Laboratory. The Chemical Laboratory contains individual lockers equipped with all apparatus necessary to perform the experiments outlined in the syllabus, ventilating hoods, drying ovens, Kjeldahl stands, quantitative balances, freezing point apparatus, etc. These are so arranged that while the students work in sections, each performs individually every experiment.

**Division III. Pathology, Bacteriology, and Hygiene.** The **Pathological Laboratory** is furnished with paraffin bath and the necessary accessories for the proper embedding of tissues, a microtome for cutting celloidin sections and one for cutting paraffin sections, a freezing microtome, a projectoscope and charts, and a collection of microscopical specimens of all the ordinary pathological lesions and many of the rare conditions, which are given to the student for study. Each student is supplied with a microscope furnished with the necessary objectives, oculars, Abbe condenser, diaphragm, etc.

In addition to this, each student is supplied with a complete set of mounting and staining materials suitable for doing first-class work in the preparation of his own specimens. Each student is required to supply himself with a suitable drawing

outfit with which to draw the essential features of the various lesions as represented by the slides which are furnished by the Department.

The **Museum**, which is located on the second floor of the college building, is equipped with a large supply of specimen jars. The gross specimens, which include most of the pathological tissues, number between one and two thousand, and additions to the collection are constantly being made. These specimens are catalogued by a card-index system, which enables the Department to keep data concerning each specimen. The specimens are given to the students repeatedly during the course of the year to familiarize them with the naked-eye appearance of gross pathological lesions.

In the **Bacteriological Department** the equipment is ample to permit students to work in pairs, entirely independently of the remainder of the class, in the preparation of culture media, staining fluids, etc., while for the sterilization of glassware and of the finished media, one hot-air oven is supplied to each group of five students, and one autoclave and one Koch's serum oven for each group of twenty-five students.

Each group of two students is supplied with boilers, burettes for accurate titration and adjustment of the reaction of the media, glass funnels with filter paper and cheesecloth, test paper, cork borers, scales, and materials for making the ordinary culture media, as bouillon, gelatin, agar, milk, potatoes, and blood serum.

Each student is individually supplied with an ample number of culture tubes, Petri dishes, flasks, cleaning brushes, fermentation tubes, platinum wires, plain and hollow ground slides, staining fluids, and mounting materials.

The department has an ice chest for preserving media and certain culture, an incubator, an electric centrifuge, Novi jars for anaerobic bacteria, animal holders to facilitate inoculation, etc.

In the preparation of culture media the students work in the laboratory on the first floor, where at present our facilities in the way of gas, water, and desk room are greater than in the laboratory on the second floor. The latter laboratory is

well lighted and has ample desk room and seating capacity. Each student is provided with a microscope for use in such class-work as the inoculation of media and the study of biological characteristics and microscopical appearances. This room is also supplied with an incubator in which the student may follow the development of the cultures, and with lockers, in which the student keeps such cultures as do not require the incubator.

### **The Teaching Staff**

The Faculty and the general teaching staff of the College of Physicians and Surgeons have been selected with scrupulous care, and comprise many of the ablest teachers and leading men and women in the West. Laboratory facilities and equipment alone are not sufficient for a thorough course. Laboratories must be manned by competent and experienced teachers and instructors, and in this College the laboratories are in charge of paid instructors, noted for their abilities as teachers in their respective departments.

## **HOSPITAL FACILITIES**

**The County Hospital Clinic.** The Los Angeles County Hospital is the most extensive, modern, and up-to-date county charity institution in the West, with about two thousand beds, and with detention wards for the insane, and modern medical, surgical, and contagious wards and departments, where all manner of surgical and medical cases may be studied. It offers rare and ample opportunities for the observation, not only of the ordinary diseases and conditions usually met with in other large hospitals, but also of rare tropical and semi-tropical diseases that drift into Los Angeles from Panama, Hawaii and the Philippines. These afford unusual opportunities for research work. The Senior and Junior classes are divided into sections of two or three students each, and these sections are allotted cases every week and are required to examine and diagnose them, to write histories covering the etiological factors of each disease, and to outline the treat-

ment and management of given cases throughout the different stages, following the case to convalescence or to autopsy. In the latter vent pathological findings are reported upon by the section in charge of the case, the efficiency, or otherwise, of the treatment being thus noted.

**The Washington Street Clinic.** From 1 to 3 p. m. each day, excepting Sundays and holidays, the College Dispensary is open to the needy poor. The Dispensary Staff of the college give their best services to those applying for treatment, and, as the College of Physicians and Surgeons is located in a decidedly well-to-do neighborhood, the clinics in this institution are of an unusually high order, capable of giving a complete case history and enabling the teacher and student to study each case in detail and note the effect of therapeutic measures. Material coming to this clinic is ample and of splendid quality. More than fifty patients apply daily for treatment in the various departments of this clinic, and the number is steadily increasing.

**The Out-Patient Clinic.**—The population of the city of Los Angeles has a large foreign and floating element, which contributes largely to our clinics in all departments. The college clinic draws materially from this available material; and the Out-Patient Clinic, Obstetrical and General, is made abundant by conditions always existing in a city of a half million population. The College Dispensary maintains a well regulated system of assigning students from the upper classes to this out-patient service, of which complete record is kept and control maintained. The obstetrical service is especially abundant.

**The Homer Toberman Clinic.**—This, otherwise known as the Seventh Street Clinic, is located at 2027 East 7th, corner of Mimosa street. It was established by the City Mission Board of the Methodist Episcopal Church, South, and turned over to this College. It is open to the needy poor from 1 to 3 p. m. each day, excepting Sundays and holidays. It is in the heart of the clinic district of Los Angeles, and a



most flourishing and prosperous clinic is being established. Every department of medicine and surgery is represented. Sections from the Junior class are rotated through this dispensary, and this addition to clinical facilities gives more than ample material for teaching purposes.

### **LIBRARY FACILITIES**

The library occupies a spacious, well-lighted room on the first floor, with east and north frontage. About two thousand medical volumes, including the latest modern text and reference books, are on the library shelves; and over eighty up-to-date medical periodicals come regularly to the library table, which enable the upper class students to keep in touch with current medical topics. The women students have their separate reading room, finely furnished and equipped.

The College of Physicians and Surgeons being an integral part of the University of Southern California, its students have free access to the University Library, containing over seventeen thousand volumes, covering the entire range of literary and scientific subjects. The Barlow Medical Library containing about four thousand volumes, donated to the medical profession of Southern California, is also available to the students of this College.

### **REQUIREMENTS FOR MATRICULATION**

In accordance with the general advance in medical and surgical teaching and the necessary pre-medical training, the following requirements for entrance to the Freshman class have been established. Beginning with the 1914-1915 session this College matriculates students only on the following standard:

I. A diploma and transcript of record from a fully accredited<sup>1</sup> high school, normal school, or academy, requiring for admission evidence of the completion of a standard course in primary and intermediate grades, and for graduation the completion of a standard high school course embracing the four-



teen units mentioned below; or an examination<sup>2</sup> in the following branches, totaling fourteen units,<sup>3</sup> to be made up of **seven required** and **seven elective units** as prescribed in the following table:

	Required Units	Elective Units	Total Units
--	-------------------	-------------------	----------------

### ENGLISH—

Reading and Practice.....	2	---	2
Study and Practice.....	---	1	1

### MATHEMATICS—

Algebra to Quadratics .....	1	---	1
Algebra (quadratic equations, the binomial theorem and the pro- gressions) .....	---	$\frac{1}{2}$	$\frac{1}{2}$
Plane Geometry .....	1	---	1
Solid Geometry .....	---	$\frac{1}{2}$	$\frac{1}{2}$
Trigonometry .....	---	$\frac{1}{2}$	$\frac{1}{2}$

### LATIN—

Grammar and Composition.....	---	1	1
Caesar .....	---	1	1
Cicero .....	---	1	1
Virgil .....	---	1	1
Cornelius Nepos .....	---	1	1

<sup>1</sup>The term "accredited" as applied to high schools, academies, colleges, and universities means institutions of those types that have been investigated and are accredited by the State University of their respective states, or by the North Central Association of Colleges and Secondary Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the New England College Entrance Certificate Board, or the Association of American Universities; provided that such accrediting is based on the studies enumerated below.

<sup>2</sup>This examination must be conducted by and under the authority of the Board of Medical Examiners of the state in which the college is located, or by a duly authorized examiner of the College Entrance Examination Board, or by the authorized examiner of an accredited university, state or otherwise, or by an examiner whose certificates are accepted by accredited colleges or universities, or by a method approved by the Judicial Council of the Association of American Medical Colleges.

<sup>3</sup>A unit is the credit value of at least 36 weeks' work of 4 or 5 recitation periods per week, each recitation period to be of not less than 40 minutes. In other words, a unit represents a year's study in any subject in a secondary school constituting approximately a quarter of a full year's work. A satisfactory year's work in any subject cannot be accomplished under ordinary circumstances in less than 120 sixty-minute hours, or their equivalent.

**Greek—**

Grammar and Composition.....	1	1
Xenophon .....	1	1
Homer .....	1	1

**GERMAN OR FRENCH<sup>1</sup>—**

Elementary .....	2	2
Intermediate .....	1	1

**Spanish—**

Elementary .....	2	2
------------------	---	---

**Scandinavian—**

Elementary .....	2	2
------------------	---	---

**HISTORY—****American History and Civil Gov-  
ernment .....**

.....	1	1
-------	---	---

Greek and Roman History.....	1	1
------------------------------	---	---

English History .....	1	1
-----------------------	---	---

**Science<sup>5</sup>—**

Biology .....	1	1
---------------	---	---

(Or Botany and Zoology, each)....	1	1
-----------------------------------	---	---

Chemistry .....	1	1
-----------------	---	---

Physics .....	1	1
---------------	---	---

Physiography .....	$\frac{1}{2}$	$\frac{1}{2}$
--------------------	---------------	---------------

Physiology .....	$\frac{1}{2}$	$\frac{1}{2}$
------------------	---------------	---------------

Agriculture .....	1	1
-------------------	---	---

Drawing .....	1	1
---------------	---	---

Manual Training .....	1	1
-----------------------	---	---

Domestic Science .....	1	1
------------------------	---	---

Music (Appreciation or Harmony)....	1	1
-------------------------------------	---	---

---

Total .....	7	28 $\frac{1}{2}$	35 $\frac{1}{2}$
-------------	---	------------------	------------------

---

<sup>1</sup>Two units of Greek or Latin may be substituted for the two required units of French or German. But this will necessitate extra work in French or German in the college year. See note 7.

<sup>5</sup>It will be greatly to the student's advantage to include Biology, Chemistry, and Physics among his elective units. See note 7. Credentials of each science course must include evidence of laboratory work.

II. In addition to the above prescribed college preparatory units, **one year's work of college grade**<sup>6</sup> in Physics, Chemistry, Biology, and German (or French), as indicated<sup>7</sup> in the following schedule:

	Lectures or Recitations per week	Laboratory <sup>8</sup> Periods per week	Total Hours per Semester	Total Hours per year Semester
Physics <sup>9</sup> .....	2	2	4	8
Chemistry .....	2	2	4	8
Biology .....	2 or 3	2 or 1	4	8
German or French.....	4 or 3		4 or 3	8 or 6
Totals .....	10	6 or 5	16 or 15	32 or 30

The foregoing table may be expressed in class hours as follows:

	Total Hrs. Lectures or Recitations	Total Hours Laboratory Work	Total Minimum Hrs. Didactic and Laboratory
Physics <sup>9</sup> .....	64	128	192
Chemistry.....	64	128	192
Biology .....	64 or 96	128 or 64	192 or 160
German or French.....	128 or 96		128 or 96
Totals .....	320	384 or 320	704 or 640

**Announcement.**—Beginning September, 1916, this College will matriculate students only who have completed two full years of work in the College of Liberal Arts of the University of Southern California or other approved colleges or universities.

<sup>6</sup>The work of this preliminary college year must extend through one college session of at least thirty-two weeks of actual instruction, including final examinations. In excellence of teaching and in content, the work of this preliminary college year must be equal to the work done in the Freshman year in standard colleges and universities.

<sup>7</sup>The statement of units and of hours of recitations as given in the lists presupposes that in each case one unit of preparatory work in that subject (two units in the case of German and French) has been offered for entrance to the college course in question. If in the case of any subject except Physics (see note 9) this preparatory work has not been done, the deficiency must be made up in full during the course of the college year prior to matriculation in the College of Physicians and Surgeons.

<sup>8</sup>Each laboratory period must extend over at least two hours.

<sup>9</sup>For the one-year Physics requirement, may be substituted one unit of high school Physics and a half-year of college Physics, which continues, and does not duplicate, the work done in high school.

### **Advanced Standing**

This College does not grant time-credit to students holding a baccalaureate degree or a degree in Pharmacy or Dentistry, or for time spent in any other than a regular College of Medicine and Surgery, the curriculum and course of which meet the requirements of the Association of American Medical Colleges; but may grant the student subject-credit for work done, satisfactory evidence of which is furnished; whereupon the student may avail himself of equivalent electives.

A student who has previously matriculated with and has spent time in another accredited medical college, recognized as such by this institution, will be required to present to the Dean of this College a statement from the Dean of the college he has attended, stating that he has paid all dues and fees due said college; that he is free from all charges or demerits of whatever nature; and that he has satisfactorily completed the course of study prescribed by the curriculum of said college; and provided that the entrance requirements of the college from which he presents his credentials were equivalent to those of the Association of American Medical Colleges at that time, and that the course of study provided and set forth in each student year was equivalent to the requirements of this school; and provided further that the Judicial Council are satisfied with his credits and markings, taking into consideration his general average, which will include his percentage of attendance upon all lectures, recitations, laboratory work, and clinics, the student may then enter upon his work in the succeeding grade. Before advanced standing will be granted him, however, the Dean of this college will verify the student's credentials. If they are found complete and satisfactory, credit for the work will be entered upon the records of this college; but such advancement will not exempt the student from the final examination requirements exacted of all students applying for a degree from this college.

A student presenting credentials and credits from another medical college, recognized by this College, should bear in mind the fact that such credentials must show that the credits

were received in the regular way, and in the regular course of instruction; and that the said course must have been regular and in accordance with the requirements of the Association of American Medical Colleges, the California State Law, and the Board of Medical Examiners of the State of California. No credit whatever will be allowed for time not actually spent in a regular recognized medical college.

A student who has attended one or more courses in a medical college otherwise reputable, but whose entrance requirements are not now equivalent to those of this institution, notwithstanding he may meet our class examination requirements, will not be granted advanced standing, unless the preliminary qualifications of said student were equivalent to the requirements of this college at the date of matriculation in the college from which he comes.

Graduates of medical colleges whose requirements were equivalent to those prescribed by the Association of American Medical Colleges, and whose credentials are recognized by the Board of Medical Examiners of the State of California, will be admitted to the Senior class without examination; provided, however, that the curriculum of study of the aforesaid college covered three full years, and provided also that the requirements for matriculation were equivalent to the requirements of the Association of American Medical Colleges at the time of his matriculation. Should, however, the college from which the applicant graduated have prescribed and required at the time of his graduation only a two years' course, the applicant will be matriculated in the Junior year and will be required to pursue the course outlined in our Junior year schedule, provided that the matriculant is working for a degree from this school, but not otherwise. Juniors and Seniors of this College are required to attend at least 80 per cent of all clinics throughout the Junior and Senior years.

To graduates and students of Colleges of Homeopathic or Eclectic Medicine will be granted time-credits for as many years as they attended those colleges, provided they have met the previous requirements of the Association of American



Medical Colleges, and that they pass an examination in *Materia Medica* and *Therapeutics*, as prescribed by this College. All students admitted to advanced standing must show credentials of having passed regular examinations in the branches taken in the year preceding the one they desire to enter, or must pass such examination in this College.

## **REGULATIONS GOVERNING THE COURSE OF STUDY**

The curriculum of study in this College is divided in a manner that enables the student to complete his minors, together with the majority of the laboratory courses, during the Freshman and Sophomore years, thus enabling the Junior and Senior students to avail themselves of the large amount of didactic, recitation, and clinical work that composes the last two years of the course.

Each student is required to attend 80 per cent of all exercises in every annual course of study for which he seeks credit. No student will be given credit on examination unless he shall have attained a grade of at least 75 per cent, or its equivalent in some other marking system, and no student will be graduated unless he shall have attained a passing grade on examination of at least 80 per cent in each and all subjects taught and examined upon in this college.

The carrying and removal of conditions in all cases will be governed by the rules and regulations promulgated from time to time by the Association of American Medical Colleges and in conformity with the State Law of California. When not in conflict with these rules and regulations a student, to advance from one grade to the next higher grade, must pass at least all but two of the required examinations in the branches or subjects taught in that year, except that in passing from the Junior to the Senior year, all of the required examinations must be passed. Should he fail, at the beginning of the succeeding session, to pass the examination in the subjects in which he has been conditioned as stated above, he may enter the higher class as a conditioned student for

that one session only, and if he does not remove the said conditions by the end of the session, he must repeat the work of the year in which the said conditions were imposed.

No student can, therefore, become a conditioned or an unconditioned member of the Sophomore class unless he has passed at least all but two of the required Freshman year examinations when that year closes; nor of the Junior class unless he shall have passed the Freshman year examinations, and, in addition, at least all but two of the Sophomore year examinations at the close of that year; nor of the Senior class unless he shall have passed all of the Freshman, Sophomore and Junior year examinations. This College does not permit the carrying of conditions into the Senior year.

This College reserves the right to refuse admission to any student, or to terminate the attendance of any student, at any time for what may appear to the Judicial Council to be good and sufficient cause, as inefficiency, conduct unbecoming a gentleman, or conduct not conducive to the morale of the class or institution; and also to refuse a student the privilege of any special or final examination, for cause, as above stated.

Students will not be permitted to substitute private work in any branch for the regular college work prescribed in our curriculum, except under the direct supervision of an instructor designated or appointed by the Dean. Examinations in work so done will be conducted by the professor to whose department it belongs. No markings nor credits from private instructors will be recognized.

A student entering this College will be required to conform to all rules and regulations of the College as promulgated from time to time by the Dean.

A student who is under suspension or expulsion from an accredited medical college will not be matriculated in this institution without the written consent of the college imposing such suspension or expulsion.

A student defacing or injuring the property of this College will be required to make due reparation for same.

**REQUIREMENTS FOR GRADUATION**

The applicant for the degree of Doctor of Medicine must have fulfilled all the requirements as set forth in this announcement, and all other additional requirements that may be promulgated from time to time by this College. He must also be eligible for graduation under the following conditions:

1. He must have attained the age of twenty-one years and have a good moral character.

2. He must have notified the Dean on or before the first day of April of the college year, in writing, of his intention to apply for and to take the final examinations of this College; said application being accompanied by the examination fee, and all previous fees having been paid.

3. He must have previously met all the matriculation requirements of this College, and must have attended at least four full courses of lectures, recitations, laboratory work, and clinics, in an accredited medical college whose requirements are equal to those prescribed by this College, no two courses having been done in the same year, and the last course having been taken in this College. If the student has attended courses in another medical college recognized by this institution, he must have satisfied the Judicial Council, through the Dean, regarding his standing and his proficiency in the branches completed, either by examination or otherwise, as the Judicial Council may elect.

4. He must have completed the required courses in all the departments of the College, and his percentage of attendance must have been at least 80 per cent in all departments, and his percentage of proficiency on examination must not have been less than 80 per cent in all the branches indicated in our curriculum,

5. He must be present at the time and place scheduled by the Dean for final examination. His absence from an examination in a given department will indicate failure in that department, and will be entered as such against the student.

6. He must undergo a written final examination (or both written and oral, if required) in all departments. Each paper must be written in English; and the penmanship, orthography,

punctuation, and general style and characteristics of each paper will be considered.

7. He must be free from demerit marks, must have discharged all conditions in each and every department, and must be present at the Commencement Exercises, unless excused in writing by the Dean.

### **COMBINED SIX-YEAR COURSE FOR THE DEGREE OF A.B. AND M.D.**

Students who have matriculated in the College of Liberal Arts of the University, and who plan to study medicine, may so combine the four-year course for the A.B. degree with the four-year course for the M.D. degree as to take both degrees in six years.

### **COMBINED COURSE FOR THE DEGREE OF A.M. AND M.D.**

Students holding the A.B. degree from recognized colleges and who enter the Freshman class of the College of Physicians and Surgeons, may matriculate in the Graduate Department of the College of Liberal Arts, thus becoming candidates for the A.M. degree. Registration in the Graduate School may be made at any time before the opening of the Junior year. The candidate pursues advanced study along some special line and submits a thesis embodying original research. The degree of Master of Arts is given to the candidate upon the completion of the requirements for the advanced degree.†

---

†For specific statement of the conditions of the A.M. degree taken under this provision, see page 53.



**FEES AND EXPENSES****College Fees**

Matriculation Fee (paid but once).....	\$ 5.00
Tuition Fee (payable in advance), per year.....	150.00
Final Examination Fee, Senior year (not returnable)....	25.00
Chemistry laboratory fee, Freshman year.....	10.00
Physiology, pharmacodynamics, and toxicology laboratory fee, Sophomore year.....	10.00
Other general laboratory fees, per year.....	5.00
County Hospital Ticket (Junior and Senior years only)	5.00

This ticket entitles the holder to clinical privileges in the County Hospital and applies to all students in attendance there.

A deposit of \$10 is required of each student to cover breakage and damage to buildings and equipment. The unexpended balance is refunded at the close of the year.

A rental of \$5 per year for microscope and of \$2 per year for immersion-lens is charged for their use in Histology, Embryology, Bacteriology, Microscopy and Pathology. The student will be charged for all breakage in any of the laboratories.

These fees are payable in advance each year. If not paid within four weeks of the beginning of the course, the right to attend lectures may be forfeited. No student will be permitted to take an examination who is in arrears for fees; and no advanced standing whatever will be given a student under such conditions.

**Expense of Living in Los Angeles**

The student can live in Los Angeles as in other large cities, moderately or extravagantly, according to his means or his habits of life. Good room and board near the College may be had for \$25.00 per month.

**Places of Association and Recreation**

The students of medicine in this College, as in other medical institutions throughout the country, come from various walks of life; and each naturally seeks for himself a contin-



uation of those environments which have shaped his previous mode of living. This city affords opportunities for the gratification of all tastes. Churches of all creeds and denominations are found here. The Y. M. C. A. is strong and influential, and extends a cordial welcome to young men who seek the refining influences of this splendid association. The Y. W. C. A., working along the same lines, is ever ready and anxious to serve the young woman who may wish to have thrown about her a Christian influence and a friendship that does much to assist and to protect. There are also numerous clubs, social and political; lodges and societies of all kinds; high-class theaters and places of amusement; and, in fact, all things that serve at times to relieve the student's mind from the strain of college work.

### **PRIZES TO BE AWARDED, SESSION 1915-16**

The Faculty will give a prize to that member of the Freshman Class who obtains the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Sophomore Class who obtains the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Junior Class who obtained the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Senior Class who obtains the highest general average in the final examinations upon the studies of that year.

### **HOW TO REACH THE COLLEGE**

Upon arrival in the city, go directly to the office of the Dean, Dr. Charles W. Bryson, Citizens National Bank Bldg., Fifth and Spring Sts., make known your wishes, and present your credentials. You will receive the most courteous treatment, and full information will be given you on all subjects pertaining to the College, either by the Dean in person, or by

his secretary. The Clerk of the College will be instructed to assist you in selecting suitable quarters, and each member of the Faculty, as well as many students of the school, will endeavor to make you feel at home. The term opens for registration on the 13th of September and instruction begins promptly on the 16th of September in all departments.

Address applications for catalogues and all other communications to the Dean,

DR. CHARLES W. BRYSON,

810 Citizens National Bank Bldg., Los Angeles, California.

## DEPARTMENTS OF INSTRUCTION

The order of the studies pursued in this College is determined by the so-called "concentration method." The school year is divided into three trimesters. During the first trimester the student concentrates his attention upon a limited number of subjects; in the following trimester, the center of interest is shifted for the time being; and at a later date the earlier material is again taken up for further emphasis and development. Experience has shown this arrangement of the schedule to possess marked advantage in flexibility of adjustment and thoroughness in the results achieved.

## A GENERAL OUTLINE OF THE DEPARTMENTS OF INSTRUCTION

A recent reclassification of the various departments of the College has effected a more intimate correlation of the instruction in related subjects. Medicine is a practical science; and in building the foundation upon which must rest the superstructure of advanced medical knowledge, there should be a grouping of the departments that necessarily combine at each stage of the process in order to secure more solidarity

in instruction and greater concentration of purpose. Therefore Anatomy, Histology, and Embryology are placed under one control, or in one department, as each deals with normal anatomical structures. Physiology, Pharmacodynamics, Toxicology, and Chemistry have been similarly grouped to facilitate the demonstration of the action, in different stages of administration, of drugs upon various animal organisms. Pathology, Bacteriology, and Hygiene are grouped together for reasons quite apparent. *Materia Medica* and Therapeutics, including Pharmacognosy, form Department IV, although Applied Therapeutics is taught throughout in the Department of Medicine, where it rightfully belongs. The Department of Medicine includes the allied departments of General Medicine, including Clinical Medicine, Physical Diagnosis, Neurology, Psychiatry, Pediatrics, Jurisprudence, Ethics, and Economics, Dermatology and Syphilography, as these various subjects are essentially medical. Department VI embraces those departments essentially surgical, or into which surgery at one stage or another largely enters, as General Surgery (including Orthopedic Surgery, Fractures, and Dislocations), Genito-Urinary Diseases, Ophthalmology, Otology, Laryngology, and Rhinology. Division VII embraces Obstetrics, Gynecology, and Abdominal Surgery.

The student body is divided into several groups in all departments, thus bringing each individual member of the class not only into close personal touch with the subject under consideration, but also into close personal contact with his instructor. There is systematic didactic instruction in all departments, intermingled with such laboratory, clinical and recitation periods as may be necessary to give the student a broad and comprehensive view of each subject.

Below will be found tabulated the grouping of subjects as embraced in our curriculum.

Division I. Anatomy, Histology, and Embryology.

Division II. Chemistry, Physiology, and Pharmacodynamics.

Division III. Pathology, Bacteriology, and Hygiene.

Division IV. *Materia Medica*, Pharmacognosy, and Therapeutics.

Division V. *Medicine* and Medical Specialties.

Division VI. *Surgery* and Surgical Specialties.

Division VII. *Obstetrics*, Gynecology, and Abdominal Surgery.

## **DIVISION 1. ANATOMY, HISTOLOGY AND EMBRYOLOGY**

**HARRY OSCAR WHITE, M.D.,**  
Professor of Anatomy, Histology, and Embryology

**CLARENCE HOLMES CRILEY, Ph.B., M.D.,**  
Associate Professor of Anatomy

**MILES GUTHRIE VARIAN, M.D.,**  
Instructor in and Demonstrator of Anatomy

### **Description of the Course and the Method of Instruction in Human Anatomy**

This department aims to present the subject of Human Anatomy in a thoroughly scientific and practical manner. The laboratory work is done under constant surveillance. The student is required to take frequent individual quizzes upon the cadaver; to demonstrate all parts dissected to a competent demonstrator; and to attend class quizzes and an individual oral final examination. The lectures supplement the laboratory work, dealing with such facts from embryology and comparative vertebrate anatomy as will give breadth to the student's view of the field. In connection with the laboratory work, lectures are delivered, reviewing the work that has been completed, calling attention to the relations and significance of the parts that have been studied, and elucidating, with the aid of specially prepared anatomical charts, diagrams, and imported models, the anatomy of difficult and important structures. Especial pains are taken to emphasize the broader morphological significance of the details of Human Anatomy. With a view to introducing students properly to the study of Practical Anatomy, they are taught by section demonstration how to dissect and what



to seek in the part to be dissected. Besides the demonstrators who are detailed to guide the student through the various steps of dissection, a specially prepared anatomical outline on every region of the human body is furnished to the student for his guidance. The aim is to stimulate exactness of observation, independence of judgment, and accurate and careful technique in practical dissection on the part of the student. The descriptive course in Anatomy is conducted by means of lectures, recitations, demonstrations on the cadaver, dry and wet anatomical preparations, and charts and models, of which latter liberal use is made. In the course in Neurology the student dissects a sheep brain in order to gain some knowledge of the morphological relations of the divisions of the brain, and then makes a careful study of the human brain and spinal cord by means of horizontal, coronal, and sagittal sections, which is further followed by a microscopic study of the central nervous system and the organs of the special senses.

Students who are suitably qualified and physicians who desire to do advanced work in Anatomy will receive every encouragement that the department is able to offer.

From among those students who show the greatest proficiency, prosectors are appointed who do special dissection work and quizzing under the direction of the professor and assistants.

#### **(a) GROSS ANATOMY**

**Course I. Freshman Anatomy.** Includes the study of Osteology, Anthrology, Myology, Angiology (including the heart), Neurology of the extremities, and dissection of the upper and lower extremities.

Lectures and Recitations.....	108 hours
Laboratory Exercises .....	360 hours
<hr/>	
Professor White and Assistants.....	468 hours



**Course II. Sophomore Anatomy.** Includes the study and dissection of the Head, the Neck, the Thoracic and Abdominal organs, the Perineum, the Ductless Glands, the Genito-Urinary Organs, the Respiratory, Circulatory, and Digestive Systems, the organs of the Special Senses, the Human Brain, the Spinal Cord, and the Sympathetic Nervous System.

This course is a continuation of that of the first year but from the standpoint of the application, and not as an abstract science. It embraces the outlines, positions, and relations of the various organs and the means of recognizing them, thus giving a knowledge necessary for diagnostic and operative purposes.

The bones are studied individually and collectively, the student pointing out and describing the different parts from actual specimens. Bones are lent to the students for private study.

Lectures, Demonstrations, and Recitations.. 84 hours

Laboratory Exercises .....144 hours

---

Professor White and Assistants.....228 hours

**Course III. Surgical Applied Anatomy and Operative Surgery** on the cadaver is taught in the third year.

Associate Professor Criley..... 36 hours

## (b) HISTOLOGY

**Course I.** Elementary Histology is given during the first trimester of the Freshman year. The study of fresh tissues, disassociation methods, and the technique for the preparation of fixed and hardened tissues are given the student. All the elementary tissues of the body, including normal blood, etc., are studied.

Professor White and Assistants.....144 hours

**Course II.** Four hours per week are devoted to the Histology of the central nervous system during the last trimester of the Sophomore year.

Professor White and Assistants..... 72 hours

**(c) EMBRYOLOGY**

Three hours each week of didactic instruction and four hours a week of laboratory work are devoted to the subject of Embryology during the last trimester of the Freshman year. Lectures and quizzes on the structure of germ cells, the decidua, and the placenta are given at the beginning of the course. Following this, the student is required to prepare and mount embryo chicks, illustrating development up to and including the differentiation of the somites.

Lectures and recitations in human embryology are a part of this course. The students are required to make drawings and diagrams of the folding in of the layers of the embryo, including the histology of the foetal membranes. The complete histogenesis of the principal organs of the body is studied. The students are required to prepare their own sections, from which demonstrations and drawings are made.

The equipment in this department is complete and consists of incubators, charts, models, and all the usual necessary histological and embryological material.

**TEXTBOOKS:****Anatomy**

Gray, Cunningham, Cunningham's "Manual of Dissection," Piersol, Morris.

Atlases and Collateral Reading: Quain's "Anatomy"; Holden; McClellan's "Regional Anatomy"; Deaver's "Surgical Anatomy"; Edinger's "Anatomy of the Nervous System"; Huntington's "Anatomy of the Peritoneum and Abdominal Cavity"; Sobotta and McMurrich's "Atlas of Human Anatomy"; Toldt's "Atlas of Human Anatomy"; Spalteholz's "Atlas of Anatomy."

**Histology**

Schaeffer; Bailey; Bohm; Davidoff; Hubert; Piersol.

**Embryology**

McMurrich; Bailey; "Human Embryology" by Kiebel and Mall.

**DIVISION 2, CHEMISTRY, PHYSIOLOGY, AND  
PHARMACODYNAMICS**

**ANDREW FREMONT WAGNER, A.M., M.D.,**  
Professor of Chemistry, Bacteriology, and Clinical Microscopy

**CHARLES C. MANGER, Ph.D., M.D.,**  
Professor of Physiology and Pharmacodynamics

**LYMAN BRUMBAUGH STOOKEY, A.M., Ph.D.,**  
Professor of Experimental Physiology

**CHESTER HERBERT BOWERS, A.M., M.D.,**  
Instructor in Physiology

**OTTO BAMES, M.D.,**  
Instructor in Chemistry

**(a) CHEMISTRY**

The following courses, included under the general subject of Chemistry, are given in the Freshman and Sophomore years: General Organic Chemistry, Physiological and Toxicological Chemistry. The needs of the medical student are especially considered in these courses, and the instructions and laboratory work made as practical as possible as viewed from the physician's standpoint, rather than from that of the chemist. The subject matter is presented by lectures and dictations, explained by demonstrations, and inculcated by recitations, while a large number of hours are devoted by the individual student in the laboratories to practical work under the supervision of the head of the department and under the guidance of competent assistants.

**Course I. General Organic Chemistry.** (First year students.) This course is given during the second trimester.

After a brief survey of Inorganic Chemistry, will be considered the more important of the Carbon Compounds, such as hydrocarbons, alcohols, aldehydes, ketones, acids, ethers, esters, carbohydrates, the benzene series and derivatives, etc., including their occurrence in nature, their close relations to one another, the structure of their molecules and determination of formulae, analysis of organic compounds, and the synthesis of the more important organic substances. This course deals with the chemistry of the common carbohy-

drates, fats and proteins, including those which occur in the body. In the laboratory the methods for their detection, differentiation and quantitative estimation are taught. The more common cleavage products of the protein molecules are studied.

**Course II. Toxicological Chemistry.** This course is given in conjunction with the course in organic laboratory work, and consists of a study of the action of the various poisons, both inorganic and organic, upon living tissues, the symptoms produced, the preparation and administration of chemical antidotes and other means of treatment, together with approved methods for the detection of poisons in stomach contents or in tissues.

Total number of hours in Courses I and II. Prof. Wagner and Dr. Bames (Freshman year, lectures and recitations, 60 hours; laboratory work, 120 hours. Total, 180 hours).

**Course III. Physiological Chemistry.** Instruction in Physiological Chemistry is given during the third trimester of the second year. The course will consist of lectures and quizzes of one hour daily and two hours laboratory work on each of five days in the week. A systematic survey of the whole field of physiological chemistry will be taken, beginning with the chemistry of the secretions, the chemistry of the foodstuffs, the blood, and the various tissues, particular attention being given to approved methods of analysis of the gastric contents, urine and feces.

Prof. Wagner (60 hours didactic and 120 hours laboratory. Total, 180 hours).

**Course IV. Analysis of Foods.** (Elective.) Three hours weekly during the second trimester of Freshman year. The more common methods employed in the analysis of foods are taught, with emphasis upon the more frequently used adulterants and preservatives and their detection.

**Course V. Water Analysis.** (Elective.) Three hours weekly during the third trimester of Freshman year. The student choosing this course is given an opportunity to familiarize himself with the methods used in the chemical analysis of water.

**Course VI. Chemical Conference.** (Elective.) Those who are interested are invited to discuss informally, at times to be announced, selected problems in medical chemistry, usually such as supplement instructions given in other ways. Problems under investigation in the laboratory are introduced for discussion.

## REFERENCE BOOKS—

<b>Chemistry</b> .....	Jones' "Physical Chemistry;" Smith's "Inorganic Chemistry;" Holland's "Medical Chemistry and Toxicology;" Hammarsten's "Physiological Chemistry;" Hawk's "Practical Physiological Chemistry."
<b>Physiology</b> .....	Freshman: Howell. Sophomore: Halliburton, and standard text books.
<b>Toxicology</b> .....	Autenrieth.
<b>Pharmacology</b> .....	Greene.
<b>Physiological Dietetics</b> .....	Lusk, "Science of Nutrition."
<b>Pathological Physiology</b> .....	Krehl, "Pathological Physiology."

## (b) PHYSIOLOGY

Instruction in this department is given by lectures, laboratory exercises, demonstrations, and recitations. The laboratory exercises enable the student to acquire a direct acquaintance with experimental methods. The chief ends sought in the laboratory exercises are precision in conduct-



ing experiments, accuracy in observation, and logic in deduction. Formal written examinations in each course of this department are held at frequent intervals. These tests are invaluable in the cultivation of a clear and concise expression of thought. The assistantships in this department are honor positions and are awarded according to scholarship and fitness.

**Course I. Physiology of the Cell.** The cell is studied as an elementary organism, emphasis being laid on it as the seat of vital processes. Special attention is given to the structure and chemistry of protoplasm, chemical reactions in the cell, irritability, contractibility, tropisms, and the development of multicellular from unicellular organisms. Three hours lectures, four hours laboratory, and two hours recitations, during the second trimester of the Freshman year.

**Course II. Physiology of Muscle and Nerve.** Kymographical records are made of each student. The laboratory exercises include a study of the following: the mechanical, thermal, chemical and electrical stimulation of muscle, and nerve, the indirect and direct stimulation of muscle, changes in intensity of stimulus, the minimal and maximal stimuli, the influence of duration of stimulus, the laws of contraction, natural tetanus, artificial tetanus, the elasticity and extensibility of muscle, the influence of temperature and load of muscular contraction, the contraction of human muscle, the ergograph, electratonus, fatigue of muscle, fatigue of nerve, muscle currents, the velocity of nerve impulse, and the conditions affecting excitability of nerve. Three hours lectures, four hours laboratory, and two hours recitations, during the second trimester of the Freshman year.

**Course III. Physiology of Circulation, Blood, and Lymph.** Graphical records are kept by each student. Most of the experiments are carried out on the frog's heart. Among the topics studied in the laboratory are: The spiral character of heart-beats, the cardio-inhibitory center, the latent period of cardiac muscle, the effect of vagus on the heart, the action

of atropin, muscarin, pilocarpin, and nicotin on the heart, the constant current of the heart, the perfusion of fluids through the heart, endocardiac pressure, the action of the heart valves, reflex inhibition of the heart, the sphygmograph, blood pressure in different parts of the vascular system, red-cell count, white-cell count, differential count, the colorimetric estimation of haemoglobin, the spectroscopical examination of haemoglobin and its derivatives, haemorrhage and regeneration coagulation. Three hours lectures, four hours laboratory, and two hours recitations, during the third trimester of the Freshman year.

**Course IV. Physiology of Respiration, Reproduction, Animal Heat.** The laboratory exercises embrace a study of the following: The movements of the chest wall, the vital capacity, respiratory waves of blood pressure, variations of intrathoracic pressure, the gases of the blood, reflex stimulation of the respiratory center, the relation of afferent fibers of vagi to the respiratory center, the respiratory quotient and its variations, modified respiratory movements, calorimetry. Three hours lectures, four hours laboratory, and two hours recitations, during the second half of the third trimester.

**Course V. Physiology of Digestion, Absorption, Secretion, Excretion, and Metabolism.** Two hours lectures, six hours laboratory, and one hour recitation, during the first trimester of the Sophomore year.

**Course VI. General Chemical Physiology.** Two hours lectures, six hours laboratory, and one hour recitation, during the first trimester of the Sophomore year.

**Course VII. Physiology of the Central Nervous System and the Sense Organs.** During the first trimester the class is trained in the anatomy of the brain. During the second trimester the physiology of the central nervous system is studied. Emphasis is laid upon reflex action, reaction time, the localization of functions in the cerebrum, the motor and sensory tracts in the central nervous system, and physio-

logical optics. One hour lecture and one hour laboratory or recitation during the second trimester of the Sophomore year.

**Course VIII. Advanced Physiology.** (Elective.) This course consists of a detailed study of special subjects in Physiology, and includes the reading of original investigations along lines to be assigned, and the performance of laboratory experiments. Each student electing this course is required to carry out a complete experiment in metabolism. Given in alternate years.

**Course IX. Operative Physiology.** (Elective.) The object of this course is to acquaint the student with the more common operative procedures in physiological investigation. The following operations are performed on the dog: Gastric, biliary, and pancreatic fistulae, Eck's operation, splenectomy, thyroidectomy, nephrectomy, pancreatotomy, gastroenterostomy, colectomy. Given in alternate years.

**Course X. Pathological Physiology.** Among the subjects discussed are: Disturbances in the digestive secretions, starvation, overeating, obesity, disturbances in the metabolism of carbohydrates, fats, and proteins, qualitative changes in metabolism, the production of organic acids, disturbances in the secretion of bile, alkaptonuria, cystinuria, pathological alterations in blood pressure, exudates, metabolism in fever anaemia, and other pathological conditions. One hour lecture and one hour recitation during the first trimester of the Sophomore year.

**Course XI. Physiological Conference.** (Elective.) Those who are interested are invited to meet at times to be announced to discuss informally select problems in Physiology, usually such as supplement instruction given in other ways. Problems under investigation in the laboratory are introduced for discussion.

**Course XII. Original Investigation.** (Elective.) Those who are qualified are encouraged to undertake research work. A reading knowledge of French and German is desirable.

**COURSES IN PHYSIOLOGY—****Freshman Physiology:**

Didactic .....	84 hours
Laboratory .....	216 hours

**Sophomore Physiology:**

Didactic .....	36 hours
Laboratory .....	120 hours

Prof. Manger and Dr. Bowers (120 hours didactic, 336 hours laboratory. Total, 456 hours).

**(c) PHARMACODYNAMICS**

**Course I. Physiological Action of Drugs.** One hour lecture, one hour demonstration or recitation, and six hours laboratory, second trimester of the Sophomore year. This course consists of a study of the changes induced in the living organism by the administration of the more common and important drugs. Laboratory demonstrations supplement the lectures.

Professor Manger and Dr. Bowers. Total, 180 hours.

Lectures, 60 hours.

Laboratory, 120 hours.

**Course II. Advanced Pharmacodynamics.** (Elective.) One hour lecture weekly during the first trimester. In this course a study is made of the physiological changes induced in the body by the less frequently used drugs. The relation between chemical constitution and pharmacological action is considered in studying some of the newer synthetical drugs. Given in alternate years.

**(d) DIETETICS AND NUTRITION**

The lectures treat the following subjects: Specific dynamic action of the different foods, calorific requirements, construction of a diet from the different articles of food, nitrogenous equilibrium, nutrition during the period of growth, inorganic



foods, some mineral waters, accessories to food, influence of mechanical work upon metabolism, diets in some pathological conditions. One hour lecture and two hour recitation during part of the third Sophomore trimester.

Professor Manger, 24 didactic hours.

### **DIVISION 3. PATHOLOGY, BACTERIOLOGY, CLINICAL MICROSCOPY, AND HYGIENE**

**ANDREW FREMONT WAGNER, A.M., M.D.,**  
Professor of Chemistry, Bacteriology, and Clinical Microscopy

**DALLAS CASE RAGLAND, M.D.,**  
Professor of Pathology and Hygiene

#### **(a) PATHOLOGY**

The subject matter in this department is taught by lectures, recitations, demonstrations with projectoscope and charts, gross and microscopical specimens, laboratory work, and autopsies.

The general subject of Pathology will be presented in the following courses:

**Course I. General Pathology.** The general principles underlying pathological changes are thoroughly inculcated, and the fundamental morbid processes taken up in the following order, viz.: Atrophy, the degenerations and infiltrations, necrosis, circulatory changes, embolism and thrombosis, inflammation, hypertrophy, neoplasms, and the specific granulomata.

Practical instructions in the preparing of specimens, including preserving, fixing, embedding, cutting of sections, mounting and staining. There is a full equipment of embedding ovens, microtomes, microscopes and other accessories for thorough instruction. The material for this course is obtained from the Department's stock, which is being continuously accumulated from autopsies, operations in the hospital and surgical clinics, and contributions of surgeons from this and other cities. Throughout the Sophomore year.

Prof. Ragland (lectures and recitations, 114 hours; laboratory work, 264 hours. Total, 378 hours).



**Course II. Special Pathology.** Includes the study of the fundamental and general pathological processes when occurring in special organs or systems. Thus what constitutes an inflammation in General Pathology becomes, with special modification and additional features, a pneumonia, a cirrhosis, etc. This course is given by lectures and recitations in connection with demonstrations with charts, projectoscope, and microscopical specimens. Such specimens, representing nearly all the known lesions of pathology, are furnished to the student by the Department. Each student is required to make drawings of the lesions represented. Junior year.

Professor Ragland, 72 hours.

**Course III. Gross Pathology and Autopsies.** The gross-appearance and naked eye tests, such as the iodine test for amyloid material, are taught in this course. The material is obtained from operations and autopsies and from the museum belonging to this department. Approved methods of making autopsies are demonstrated to the students as a class, but they will also be required individually to take turns in assisting the demonstrator, and in writing up the autopsy.

Dr. Maisch (48 clinical hours, each section).

**Course IV. Post-graduate Course.** This is given to physicians and others desiring to take up work along special lines in pathology. The number of hours given to this course depends upon the desires of the applicants, and the course is given only in case there is a sufficient demand.

## **(b) BACTERIOLOGY**

The whole subject of Bacteriology is taught by lectures, quizzes, and laboratory instruction throughout the first trimester of the Sophomore year. A review is given in the Senior year.

**Course I.** The first half of the didactic work of the course includes the classification and the physical and chemical structure of the bacteria in general, as well as the products of their biological activities, and particularly the antibodies, the opsonic substances, and the theories of infection and im-

munity relating to the various pathogenic micro-organisms. The second half of the course covers the identification, staining, and cultural and other biologic characteristics of the various species of pathogenic bacteria, as well as of the pathogenic protozoa, yeasts, and moulds. During the second half of the trimester a course of lectures is given on the more important parasites, including the protozoa, the helminthes, and the arthrospores, with the demonstration of specimens from the museum.

**Course II.** The laboratory work is comprehensive, and aims to be as practical as possible. The student is made familiar with approved methods of technique by requiring him actually to perform the work done in bacteriological laboratories, from the preparation of staining fluids and of culture media to the cultivation and inoculation of the different organisms.

The laboratory is equipped with autoclave, steam sterilizers, hot air ovens, scales, etc., for each group of five students, while individually each is supplied with stew pan, gelatin, agar, peptone, culture tubes, and every accessory for making all the commonly used media.

Professor Wagner (60 hours lectures and 120 hours laboratory. Total, 180 hours).

### **(c)—CLINICAL MICROSCOPY**

This course is given every day during the first trimester of the Junior year. It consists chiefly of practical laboratory work, with a sufficient number of lectures to cover the subject matter in a systematic and thorough manner. The blood, urine, sputum, gastric contents, feces, exudates, etc., will be studied in a regular order, together with the principles and technique of such subjects as the agglutinative tests, the opsonins, the precipitins, the hemolysins, the preparation of bacterins, the complement fixation tests as applied by Wasserman and Noguchi, etc. Material for class and individual work is obtained from the daily clinics in charge of the school and from the Los Angeles County Hospital. The subjects

are considered and the clinical material studied with particular reference to their bearing upon the diagnosis of disease; and all the approved modern methods, microscopical, bacteriological and chemical, are taught and demonstrated.

Professor Wagner (lectures, 12 hours; laboratory, 96 hours. Total, 108 hours).

#### **(d) HYGIENE**

Owing to the rapid advances of the last few years, State Medicine and Hygiene has become a very important branch of this science. The subject is taught by didactic lectures and quizzes eighteen hours throughout the Sophomore year and two hours each week throughout the Senior year.

Hygiene as applied to preservation of health and prevention of disease will be thoroughly illustrated, especial attention being given to the pure food law, adulterations and dilutions, labeling, etc. School-room and military hygiene will be thoroughly covered and especial consideration will be given to the hygiene of the sick-room. This is a complete course in the hygiene of air, soil, water, climate, food, and diet; food supply, food diseases, and adulterations; heating, lighting, and ventilating of dwellings; municipal sanitation and water supply, sewage and drainage, the disposal of refuse; the prevention of contagious diseases, including tropical diseases; the laws regulating quarantine, etc.; in fact, all branches of Preventive Medicine, Hygiene, and Sanitation. Eighteen hours during the year are devoted to work in the laboratory. The student is required to make chemical and bacteriological analyses of water, milk, and butter, together with tests for preservatives in canned meats, fruits, and vegetables.

Professor Ragland (Sophomore year, 18 hours; Senior year, 72 hours. Total, 90 hours).

#### **TEXT BOOKS:**

##### **Pathology:**

"Pathology," McFarland; "Principles of Pathology, General and Systemic," Adami and Nicholls; "Diagnostic Methods," Webster; Coplin; Delafield and Prudden.

**Bacteriology:**

Park's "Pathogenic Bacteria and Protozoa"; Jordan's "General Bacteriology"; Muir and Ritchie; and MacFarland's "Pathogenic Bacteria."

**Hygiene.**

Parkes; Egbert; Bergy; Rosenaw.

**DIVISION 4. MATERIA MEDICA, PHARMACOGNOSY,  
AND THERAPEUTICS**

EDWARD DOUGLASS JONES, M.D.  
Associate Professor of Therapeutics

WILLIAM DUFFIELD, M.D.,  
Lecturer on Therapeutics

CHARLES F. NELSON, S.B., M.D.,  
Instructor in Materia Medica

RICHARD C. MacCLOSKEY, B.S., M.D.,  
Instructor in Materia Medica

ROBERT MORRIS DUNSMOOR, M.D.,  
Instructor in Materia Medica

WILLIAM ETHELBERT HALL, M.D.,  
Instructor in Therapeutics

**Course I.** Each drug is first considered in its crude and primary state; then the botany of the various plant and vegetable elements entering into the basic principles of our materia medica is studied, together with the different alkaloids of each; and finally the mineral elements, both basic and analytic, from the viewpoint of materia medica. This department is supplied with crude drugs and standard preparations for direct demonstration, which enable each student to familiarize himself not only with the appearance, but also with the odor, the taste, and the general characteristics, of each. Laboratory facilities are at hand for demonstrating the pharmacognosy and the pharmacology of each drug and compound, while the student is referred to the Department of Physiology for the pharmacodynamics of elementary drug therapy. Two hours weekly, throughout the first and second Trimester of the first year.

Dr. MacCloskey, 48 hours.



**Course II.** Advanced materia medica (including prescription writing, dosage, etc., in all of its complications), and an outline of elementary therapeutics and toxicology. This is given with a view to preparing the student for applied therapeutics, as taught in the Department of Therapeutics and General Medicine. The student must know *Materia Medica* as well as Pharmacognosy, Pharmacology, and the Pharmacodynamics of drugs before he can know drug therapy. Three hours weekly, third Trimester of the Sophomore year.

Dr. Nelson, 36 hours.

**Course III. Therapeutics.** The method of instruction is principally didactic, with reviews from time to time, supplemented by clinical construction at regular periods. An outline of classification of therapeutic remedies based upon their physiological action and clinical results is supplied at the beginning of the term. Under each division and subdivision of this outline, the most important drugs of each class, together with their preparations, derivatives, and compounds, are briefly reviewed physiologically, and then successively studied therapeutically in detail. The most important feature to be impressed upon the student is the application of certain remedies and measures to the cure or alleviation of certain pathological conditions as found at the bed-side, in accordance with the recognized physiological action of the remedies or class of remedies under discussion. Three hours weekly second and third Trimesters of the Junior year.

Dr. Duffield, 72 hours.

**Course IV. Therapeutics.** The class is divided into sections of some four to ten members each and to each section are assigned from time to time certain patients afflicted with the disorder to be studied. The individual students are required to write complete histories of the cases presented, and to outline methods of management according to their own previous knowledge. During a class conference they are then corrected, criticized, quizzed, and instructed in the various recognized methods of treatment and management of the



diseases under consideration, this method being supplemented with didactic teaching. One hour weekly, throughout the Senior year.

Associate Professor Jones, 36 hours.

**TEXT BOOKS:** Shoemaker; Potter; Butler; Wood; Forchheimer.

## DIVISION 5. MEDICINE AND MEDICAL SPECIALTIES

THOMPSON B. WRIGHT, A.M., M.D.,  
Professor of Medicine

FRANCIS OLIVER YOST, M.D.,  
Professor of Pediatrics

JAMES TUCKER FISHER, M.D.,  
Professor of Neurology and Psychiatry

CHARLES C. MANGER, Ph.G., M.D.,  
Professor of Neurology

CHARLES C. BROWNING, M.D.,  
Professor of Diseases of the Chest

F. M. POTTENGER, A.M., M.D., LL.D.,  
Professor of Diseases of the Chest

HENRY HERBERT, M.D.,  
Associate Professor of Medicine

ANSTRUTHER DAVIDSON, C.M., M.B., M.D.,  
Associate Professor of Dermatology

EDWARD DOUGLASS JONES, M. D.,  
Associate Professor of Therapeutics

HENRY DIETRICH, M.D.,  
Associate Professor of Pediatrics

WILLIAM ELMER CARTER, M.D.,  
Assistant Professor of Medicine

FREDERICK A. SPEIK, S.B., M.D.,  
Assistant Professor of Medicine

WALTER F. WESSELS, M.D.,  
Assistant Professor of Medicine and Lecturer on Gastro-Enterology

PETER C. REMONDINO, M.D.,  
Lecturer on the History of Medicine and Medical Bibliography

H. E. McDONALD, M.D.,  
Lecturer on Life Insurance Examination

GEORGE L. GREER, A.B., LL.B.,  
Lecturer on Medical Jurisprudence

ALBERT TUTTON CHARLTON, A.B., M.D.,  
Lecturer on Medicine

**WILLIAM DUFFIELD, M.D.,**  
Lecturer on Medicine

**EARL M. BROWN, B.S., M.D.,**  
Instructor in Clinical Medicine

**HARVEY SMITH, M.D.,**  
Instructor in Clinical Medicine

**LEWIS D. REMINGTON, M.D.,**  
Instructor in Clinical Medicine

**HARVEY J. FORBES, M.D.,**  
Instructor in Clinical Medicine

**JOHN VINCENT BARROW, S.B., M.D.,**  
Instructor in Medicine

**FRANK JAMES LEAVITT, M.D.,**  
Instructor in Medicine

**EDWARD RUSSELL HANLON, Ph.G., M.D.,**  
Instructor in Medicine

**A. F. MAISCH, M.D.,**  
Instructor in Medicine

**R. S. CUMMINGS, M.D.,**  
Instructor in Medicine

**W. W. MACKENZIE, M. D.,**  
Instructor in Medicine

**J. S. LANCASTER, M.D.,**  
Instructor in Medicine

**ARTHUR STANLEY GRANGER, A.B., M.D.,**  
Instructor in Medicine

**DWIGHT S. MOORE, M.D.,**  
Instructor in Medicine

**M. J. ROBERTS, M.D.,**  
Instructor in Medicine

**J. EUGENE FAHY, A.B., M.D.,**  
Instructor in Medicine

**LEON SHULMAN, M.D.,**  
Instructor in Medicine

**HERMAN SUGARMAN, M.D.,**  
Instructor in Medicine

**A. J. SCOTT, Jr., M.D.,**  
Instructor in Pediatrics

**WM. B. KERN, M.D.,**  
Instructor in Psychiatry

## **(a) NORMAL PHYSICAL DIAGNOSIS**

Lectures and demonstrations in Normal Physical Diagnosis. This work includes the regional topographical anatomy of the body, the rules governing inspection, palpation, percussion and auscultation, together with mensuration, and including

a short course on the signs and symptoms of general diagnosis. In this course specific symptomatology is avoided. Three hours each week during the third trimester of the Sophomore year.

Dr. Mackenzie, 36 hours.

## **(b) PHYSICAL DIAGNOSIS**

**Didactic.** Didactic instruction by charts, models, drawings, diagrams, and living subjects. Junior year, one hour each week.

Associate Professor Herbert, 36 hours.

**Clinical.** Practical instruction at the County Hospital. History-writing constitutes a material part of the work of this course. Mondays and Thursdays throughout the Junior year.

Associate Professor Herbert, Drs. Leavitt and Mackenzie.

Total, 120 hours per section.

## **(c) GENERAL MEDICINE**

Didactic and recitative instruction. The work is of a thoroughly practical nature and embraces a study of internal diseases generally, parasitic diseases, infectious diseases, constitutional diseases and the diseases of the lungs, heart and arteries, liver, stomach and intestines, pancreas, kidneys, spleen and lymphatic system, blood and ductless glands. Three hours per week throughout the Junior year.

Drs. Wessels, Leavitt and Carter. Total, 108 hours.

**Course II. Junior Clinical Medicine.** Clinical bedside instruction at the County Hospital (exclusive of the work given in Physical Diagnosis). The class is divided into sections and an instructor assigned to each section. Two hours per week throughout the Junior year.

Professor Wright, Professor Browning, Dr. Charlton and Assistants. Total, 72 hours.

**Course III. Senior Medicine.** Didactic and recitative instruction in general medicine. Three hours per week throughout the Senior year.

Professor Wright and Drs. Speik and Wessels (one hour each.) Total, 84 hours.

**Tropical Medicine** is taught in the Senior year, one hour each week.

Dr. Brown, 36 hours.

**Tuberculosis** and the use of Culture Products are taught in the Senior year, one hour each week.

Professor Browning (Didactic, 36 hours; clinical, 48 hours each section).

**Course IV. Senior Clinical Medicine.** In the Senior year three mornings each week, from 10 a. m. to 12 m., are devoted to medical ward and bedside clinics at the County Hospital. The work is divided into four courses, as follows:

- (A) Infectious and Respiratory Diseases.  
(First trimester, Dr. Charlton; second trimester, Dr. Wessels; third trimester, Dr. Speik.)
- (B) Diseases of the Heart, Kidney and Blood Vessels.  
(First trimester, Dr. Speik; second trimester, Dr. Charlton; third trimester, Dr. Wessels.)
- (C) Gastro-Intestinal and Liver Diseases.  
(First trimester, Dr. Wessels; second trimester, Dr. Speik; third trimester, Dr. Charlton.)
- (D) Diseases of the Blood and Ductless Glands and Constitutional Diseases.  
(Second trimester, Prof. Wright; third trimester, Dr. Barrow.)

Total, Prof. Wright, Drs. Speik, Wessels, Charlton and Barrow (216 hours each section).

**(b) PEDIATRICS**

**Course I. Junior Class.** Didactic work, special attention being given to the subjects of growth and development, infant feeding and the infectious diseases of childhood. One hour per week, throughout the Junior year.

Dr. Dietrich, 36 hours.

**Course II. Senior Class.** One hour each week of didactic instruction and two hours per week clinical instruction. Especial effort is made through clinical work and recitations to impress upon the student the peculiarities of the diseases of childhood and the practical points of diagnosis and treatment. Three hours throughout the Senior year.

Professor Yost and Assistants (didactic, 36 hours; clinical, 24 hours each section). Total, 60 hours.

**(c) NEUROLOGY AND PSYCHIATRY**

**Course I.** The course in Neurology and Psychiatry in the Junior year consists of lectures, clinics at the College Dispensary and the County Hospital.

Professor Fisher (36 hours didactic and 24 hours clinical instruction each section). Total, 60 hours.

**Course II.** A course in neuropathology is given one hour each week during the second trimester and two hours each week during the third trimester of the Junior year.

Professor Manger, 36 hours.

**Course III.** The Seniors receive both didactic and clinical instruction in neurology and psychiatry.

The clinical course familiarizes the student with the common disturbances of the nervous system and with some of the more important mental diseases. The detention of the insane at the County Hospital, before commitment to the State Hospital for the insane, allows the student to observe many forms of mental derangement.

Professor Manger and Assistants (72 didactic hours, 72 clinic hours). Total, 144 hours.



**(d) DERMATOLOGY**

Dermatology, embracing within its scope Syphilography, has been taken from the Department of Genito-Urinary Diseases and placed in a separate department.

This course embraces one hour each week throughout the Senior year. The subject-matter covered will be the histopathology and bacteriology of the skin, the relations of diseases of the skin to other diseases and to other organs, the individual study of all cutaneous affections, and their diagnosis and latest methods of treatment, including X-ray therapy. The cutaneous manifestations of the various eruptive fevers and their diagnosis and clinical values, will also be considered. Syphilis and its effects, direct and remote, upon healthy and diseased organs, together with the most modern methods of diagnosis and treatment, will be thoroughly studied throughout the year.

Associate Professor Davidson (36 didactic hours, 24 clinic hours). Total, 60 hours.

**(e) ELECTRO-THERAPEUTICS**

**Course I. Electricity.** One lecture a week is given in the first half of the Junior year covering the source, characteristics, physiological action, and therapeutics of each of the electrical currents used in medicine.

**Course II. Roentgenology.** Lectures and demonstrations during the last half of the Junior year deal with the X-ray tube, the transformers, and accessories in their relation to practical radiography. Radium and Light will be included in the consideration of radiotherapy. The class will have access to a complete X-ray laboratory, having a 16-inch Ruhmkorff coil. The apparatus for the Oudin, D'Arsonval, and Tesla high-frequency currents, together with the usual wall-plate equipment, will also be available for demonstration throughout the year.

Dr. Dunsmoor, 36 hours.

**(f) MEDICAL JURISPRUDENCE**

Lectures are given on the following subjects: The legal relations of physician to patient and patient to physician, including rights to compensation, collection of fees, and malpractice; the legal relations of physician to government, including government regulation of practice, power to protect public health, nuisances and their abatement, the adulteration of foods; elementary general principles of law, knowledge of which is frequently required by physicians, including wills, estates of insane and deceased persons, crimes of violence, rights of children, negligence; the legal aspects of mental disorders and diseases, including testamentary capacity and criminal responsibility of the insane and those addicted to alcoholism and drugs, their legal incompetency to make contracts, their property rights, and the responsibilities of their custodians; personal injuries by violence (a) in civil damage cases, and (b) in criminal cases, including rules of evidence, medico-legal inspection, and autopsies (a) to ascertain cause of death, and (b) to obtain evidence of manner of infliction; suicide; toxicology, sex perversions, pregnancy, disease and divorce; life and accident insurance; and expert and opinion evidence, including the medical witness, his position, rights, and duties.

Efforts will be made in this department to familiarize students with the proper methods of practice and procedure in all matters wherein the practitioner of medicine is likely to come in contact with the law or the government, and especially in that large class of cases where accurate knowledge of legal requirements is called for upon the instant. The lack of such knowledge frequently has caused great embarrassment both to the courts and to the medical profession.

George L. Greer, Attorney-at-Law, 36 hours.

**(g) HISTORY OF MEDICINE AND MEDICAL BIBLIOGRAPHY**

Dr. P. C. Remondino will deliver, during the session of 1915-'16, a series of lectures to the entire student body upon the History of Medicine and Medical Bibliography. Dr.

Remondino has been selected to present this course, as his finished scholarly attainments, and his inherent ability, together with his broad and comprehensive knowledge of this subject, the results of lifelong study and research, will enable him to make this course particularly interesting and instructive. During the coming year Dr. Remondino will begin his course with a lecture on the medicine of the ancient Accadians, in the course of which he will trace by the similarity of their Shaminic medicine, the ancient race relationship existing between the Laplander of northern Europe and the ancient Tauranian races that once inhabited the plains and mountains of Babylonia. The medicine of the aboriginal American, Oceanic, and African tribes will form the subject of the next lectures, during which the medical practice of the Maya Indians of Yucatan will be traced to its origin in early Egyptian sources. The next lectures will be devoted to the elucidation of the states of Egyptian, Hindoo, and Greek medicine prior to the pre-Hippocratic era. Then will follow the Hippocratic and Alexandrian, the Roman and the Arabian eras, the period of renaissance in Europe in the sixteenth century, and the development of the medical science of the present day.

Dr. Remondino, 6 hours.

#### **(h) LIFE INSURANCE EXAMINATION**

A series of lectures will be given to the Junior class on Life Insurance Examination.

Dr. McDonald, 6 hours.

#### **(i) MEDICAL ETHICS AND ECONOMICS**

This College has adopted the recommendation of the Educational Council of the American Medical Association and added to its curriculum a department of Medical Economics. This course will consist of lectures to the Senior class upon the fundamental business principles so essential to the success of the young practitioner, the duties of the medical man to himself, to his confrères, to his patients, and to the public

at large, the relation that should exist between the medical man and the druggist, the Church, and the State, etc. This course will aim to inculcate that broad spirit of altruism that should control the relations existing between mankind, and to emphasize the fraternal spirit that should characterize the medical profession.

Professors Bryson and Seymour, 12 hours.

## **TEXT BOOKS:**

### **Medicine:**

Practice: Anders; Osler; Kelly; Tyson; Edwards; Manson; Jackson, Herchfelder.

Diagnosis: Anatomy (for Sophomores); Osler; Butler; Emerson; Anders-Boston; Cabot's "Diseases of the Blood"; Todd's "Manual of Clinical Diagnosis"; Da Costa; C. B. Slade, "Physical Examination and Diagnosis"; Musser.

### **Pediatrics:**

Holt; Rachford; Rurah; Grulee.

Collateral reading: Rotch; Koplik; Chapin; Jacobi; Kerr; Kerley; Pfaundler and Schlossman.

### **Neurology and Psychiatry:**

Dana; Star; Mettler; "Outlines of Psychiatry," by William A. White; Church and Peterson.

### **Dermatology:**

Stelwagon; Pusey; Schamberg.

### **Electro-therapeutics:**

Potts, "Electricity, Medical and Surgical"; McIntosh, "Practical Handbook of Medical Electricity."

### **Medical Jurisprudence:**

Taylor; Witthaus and Becker, "Forensic and Medicine Toxicology"; Peterson and Haines.

**DIVISION 6. SURGERY AND SURGICAL  
SPECIALTIES**

**JAMES HARVEY SEYMOUR, M.D.,**  
Professor of Surgery and Clinical Surgery

**ORVILLE O. WITHERBEE, M.D.,**  
Professor of Surgery and Clinical Surgery

**CHARLES WILLIAM BRYSON, A.B., M.D.,**  
Professor of Abdominal and Clinical Surgery

**WILLIAM LEANDER ZUILL, M.D.,**  
Professor of Otology, Laryngology, and Rhinology

**THOMAS JEFFERSON McCOY, M.D.**  
Professor of Ophthalmology

**JOHN JOHNSON KYLE, B.S., M.D.,**  
Professor of Otology, Laryngology and Rhinology.

**CHARLES H. WHITMAN, M.D.,**  
Professor of Clinical Surgery

**FITCH C. E. MATTISON, M.D.,**  
Professor of Surgery

**W. W. RICHARDSON, M.D.,**  
Professor of Surgery

**GEORGE JESSE LUND, M.D.,**  
Associate Professor of Otology, Laryngology, and Rhinology

**GEORGE WASHINGTON McCOY, A.M., M.D.,**  
Associate Professor of Ophthalmology

**P. C. H. PAHL, M.D.,**  
Associate Professor of Orthopedic Surgery, Fractures, and Dislocations

**WALTER LESLIE HUGGINS, Ph.B., M.D.,**  
Assistant Professor of Surgery

**ANDERS PETERSON, M.D.,**  
Instructor in Genito-Urinary Diseases

**CLARENCE H. CRILEY, Ph.B., M.D.,**  
Instructor in Surgery

**ANDREW P. WILSON, M.D.,**  
Instructor in Surgery

**FRED E. LETTICE, M.D.,**  
Instructor in Surgery

**CHARLES EATON PHILLIPS, A.B., M.D.,**  
Instructor in Surgery

**HARLAN SHOEMAKER, M.D.,**  
Instructor in Surgery

**EDWARD SWIFT, M.D.,**  
Instructor in Surgery

**H. W. EDWARDS, B.S., M.D.,**  
Instructor in Surgery

**W. H. KIGER, M.D.,**  
Instructor in Proctology

**ROSS A. HARRIS, M.D.,**  
Instructor in Ophthalmology



**(a) GENERAL SURGERY**

The course in this department embraces both didactic and clinical methods and consists of the following:

**Course I.** During the last trimester is devoted to Minor Surgery and Bandaging, together with the general principles of anaesthesia. Minor Surgery, in its broadest sense, as taught in the Sophomore year, lays the foundation for the Junior and Senior surgical courses. Anaesthesia is treated both minutely and comprehensively. Two hours per week, last trimester of Sophomore year.

Dr. Wilson, 24 hours.

**Course II.** In the Junior year a thorough course is given in the basic principles of Surgery. This course consists of lectures, recitations, quizzes, ward-walks, close bedside demonstrations and instruction, history-writing, case-taking, the actual participation in the treatment and management of all varieties of surgical conditions, and the postmortem study of various cases that have been under observation in ward and clinic. Clinical material is abundant in all departments and each student in each section in each department receives ample personal and the very best collective instruction.

**Didactic:**

Drs. Huggins, Phillips and Shoemaker (108 hours).

**Clinical:**

Drs. Huggins, Shoemaker, Philips, Criley, Swift, Edwards (96 hours).

Total, 204 hours.

**Course III. The Treatment of Fractures and Dislocations.** In this course the didactic and mechanical instruction is supplemented by bedside observation both at the college clinic and in the wards of the County Hospital. Here are shown the latest methods in the treatment of fractures and dislocations, the adjustment of splints, and the application of plaster casts, jackets, and other appliances. Three hours

each week, during the second trimester and one hour per week during the third trimester of the Junior year.

Dr. Lettice, 48 hours.

**Course IV.** The course in Senior Surgery is designed to be essentially an operative one, covering the entire range of General Surgery. Three mornings each week from 8 to 10 a. m., in the General Operative Amphitheater at the County Hospital. This clinic is for Senior students, and will not only embrace the surgical technique along with the surgical procedures, but will also include the pre- and post-operative management of each case presented. The Senior students are also working in the college clinic and in the Out-Patient department, and when the student finishes his work here in this school, he has had proper training and his foundation is broad and ample. This clinic course is interspersed with didactic, recitative, and quiz periods, which serves to round out the course in the most adequate manner.

Professors Seymour, Witherbee, Mattison and Richardson  
(didactic, 48 hours; clinical, 168 hours each section.  
Total, 216 hours.

## **(b) ORTHOPEDIC SURGERY**

Orthopedic Surgery is given throughout the Junior year, and consists of one hour of didactic work each week during the second trimester and two hours each week during the third trimester, with extensive clinical demonstration, two hours each week, at the County Hospital. This course will include instruction in the application and adjustment of orthopedic apparatus; the theory and practice of the treatment of tubercular bone disease by mechanical means, and by the hygienic-dietetic method; the treatment of scoliosis by gymnastics, electricity, and massage; the treatment of talipes and flat-foot; the management of infantile paralysis; and practical work in the plaster room as well as operative hospital work.

Dr. Pahl (36 didactic hours, 24 clinic hours each section).  
Total, 60 hours.

**(c) GENITO-URINARY DISEASES**

This course comprises a series of lectures and clinical demonstrations throughout the Senior year, and is limited to Senior students.

In the didactic course, the anatomy, histology, embryology, and physiology of the entire genito-urinary tract is reviewed, such time being spent on this as to insure a thorough knowledge of the fundamental principles of this subject, and then the diseases of the various organs are taken up separately, special attention being given to the pathological changes and their diagnosis.

The operative procedures are taught on the cadaver, and the students are required to go through the various steps of each operation under the guidance of the instructor.

Special instruction is given in palpation, percussion, and various other methods pertaining to genito-urinary diseases in general, and individual instruction is given in the use of the cystoscope, urethroscope, catheterising ureters, etc.; after which the specific diagnosis of each pathological condition is given in detailed study of its treatment. These lectures are illustrated by a series of clinical demonstrations upon material from the College Clinic and at the County Hospital.

Dr. Peterson (36 didactic hours, 24 clinic hours, each section). Total, 60 hours.

**(d) PROCTOLOGY**

A department of Proctology has been added under Surgical Specialties. Clinical material is abundant and clinics are conducted at the County Hospital regularly, and will include digital, proctoscopic examinations and operative work, with sufficient didactic and recitative hours to round out the course in this too often neglected surgical specialty.

Dr. Kiger (12 didactic hours, Junior year; 24 clinical hours Senior year).

**(e) OTOLOGY, LARYNGOLOGY, AND RHINOLOGY**

The work in this department is so arranged as to give the student the broadest possible acquaintance with the clinical side of these subjects. The class is divided into sections, each section having three hours of clinical work in the College Dispensary in addition to the County Hospital work. The didactic work of the department consists of two lecture hours each week in addition to frequent recitations and reviews. The student has every opportunity to make himself thoroughly familiarly with all the practical details of this subject, and his knowledge is frequently tested by both oral and written reviews. The didactic course includes: First, a careful review of the anatomical details of the Ear, Nose and Throat, and their accessory sinuses. Second, a treatment of the influences of general diseases upon these special organs and of the influence that diseases of these organs exert upon the general condition and health of the patient. Third, methods of examination of these organs and special consideration of the diseases affecting them. Fourth, a careful study of the diseases of the accessory sinuses. Fifth, operations.

Professors Zuill and Kyle and Associate Professor Lund  
(36 didactic hours, 24 clinical hours each section).

Total, 60 hours.

**(f) OPHTHALMOLOGY**

This course on diseases of the eye will consist of one didactic hour each week in the Junior year and two clinical hours each week in the Senior year, illustrated by the disease in the patient, and by charts and blackboard drawings. Minor operations are performed before the class at the College Clinic and major ones for them at the County Hospital. Ample material is presented at both places. Practical instruction is given on the eye in general; on the recognition, differentiation, and treatment of both the common and the complicated diseases and injuries; on the principles and practice of refraction; on the uses of the ophthalmoscope; and on

the recognition of diseases of the eye as diagnostic of disease in remote organs.

Professor T. J. McCoy and Associate Professor George W. McCoy (36 didactic hours, 24 clinic hours each section. Total, 60 hours).

## **TEXT BOOKS:**

### **General Surgery:**

DaCosta; Wyeth; Lexer-Bevan; Scudder's "Treatment of Fractures"; Stimson on "Fractures and Dislocations."

Operative Surgery: Bryant; Bickham; Treaves; Keen.

Minor Surgery: Foote.

### **Orthopedic Surgery:**

Whitman; Bradford and Lovett; Young; Willard.

### **Genito-Urinary Diseases:**

No one textbook is followed in the course, but the students of this branch are recommended to buy various texts for the sake of comparing diverse views. Works recommended: Casper; Kreissel; Fynger; Corner; Keyes; White and Martin; Morrow's "System"; Deavers' "Diseases of the Prostate Gland"; and the various texts on Anatomy, Histology, and Embryology used in other departments of the school.

### **Otology, Laryngology, and Rhinology:**

The collateral reading advised on this subject are such works as Dr. Braden Kyle, "Diseases of Nose and Throat"; J. J. Kyle, "Diseases of Ear, Nose, and Throat" (3rd edition); Bishop on "Diseases of the Nose, Throat, and Ear"; Bacon on "Otology"; Barnhill-Wales, "Modern Otology"; Packard, "Diseases of the Nose, Throat, and Ear."

### **Ophthalmology:**

May; Fox, Jackson; De Schweinitz, or Fuchs.



**DIVISION 7. OBSTETRICS, GYNECOLOGY, AND  
ABDOMINAL SURGERY**

**WALTER SYDNEY JOHNSON, A.B., M.D.,**  
Professor of Obstetrics

**CHARLES WILLIAM BRYSON, A.B., M.D.,**  
Professor of Gynecology and Abdominal and Clinical Surgery

**HENRY E. SOUTHWORTH, M.D.,**  
Associate Professor of Gynecology

**LYLE GILLETT McNEILE, M.D.,**  
Assistant Professor of Obstetrics

**HENRY W. HOWARD, M.D.,**  
Assistant Professor of Gynecology

**ELMER R. PASCOE, M.D.,**  
Instructor in Gynecology

**(a) OBSTETRICS**

**Course I.** Instruction in Obstetrics is begun in the third year, and is carried on by means of didactic lectures, recitations, and demonstrations upon the manikin and living subject, and by the use of charts, wet and dry specimens, models, and pelves. The subject matter during this year embraces the anatomy of the pelvis; the physiology and development of the ovum, normal pregnancy, normal labor, and normal puerpery.

Three hours a week, during the first and second trimesters, and four hours each week during the third trimester of the Junior year.

Professor Johnson (12 hours), Dr. McNiele (108 hours).

Total, 120 hours.

**Course II.** Lectures and recitations are continued during the fourth year, at which time the complications and difficulties liable to be encountered in the practice of the science and art of obstetrics are successively considered, viz., abnormal pregnancy, dystocia, and abnormal puerpery. Special attention is given to asepsis, external palpation, pelvimetry, the use of forceps, and the different obstetric operations.

Students during this year, in addition to the above, are expected to attend six or more cases of labor, under the supervision of the Professor of Obstetrics. The maternity

wards of the County Hospital and the many charitable cases coming under the care of this department afford ample material for practical demonstration.

Professor Johnson. Total, 72 hours.

## **(b) GYNECOLOGY AND ABDOMINAL SURGERY**

**Course I. Junior Gynecology.** This course is given to the Junior Class in the amphitheatre, college, and hospital clinics, and consists of lectures; recitations; manikin, chart, and drawing demonstrations; section clinics at the Homer Toberman (Seventh Street) Clinic; and bedside and ward clinics at the County Hospital. The members of the Junior Class are divided into sections, under competent instructors, and are required to write histories, examine patients, suggest diagnosis, treatment, and management in individual cases, go over again the anatomy and physiology of the female generative plexus, repeatedly review the etiology of the diseases they see, and thus lay the foundation of Gynecology broadly and well. This course prepares the student for Course II, given in the Senior year.

Associate Professor Southworth, Drs. Howard and Pascoe (36 didactic hours, 24 clinic hours each section). Total, 60 hours.

## **Course II. Senior Gynecology and Abdominal Surgery**

(a) Instruction in this department is didactic, recitative, and clinical, comprising lectures, recitations, quizzes, dispensary and hospital clinics, and minor and major operations. It continues throughout the Senior year. This course at the County Hospital is essentially an operative course, two hours each week being spent in the Surgical Operating Amphitheatre, where the entire class witness and have explained to them minutely the different methods, as well as the post-operative care of patients. Students are divided into small classes, the better to enable them to witness closely the technique of examinations and manipulations.

(b) While in the clinics at the College Dispensary, students are required to examine, diagnose, and treat patients in the presence of the professor in charge. The student is thus brought into close personal relation with a large number and variety of cases, and is also enabled to assist at all of the minor and major operations in gynecology and abdominal surgery. Diseases of the bladder and urethra are thoroughly covered in this department and their medical and surgical treatment outlined and demonstrated. Methods of inspection and examination are taught by the use of charts and manikins, as well as demonstrated upon the living subjects. The practical manipulation of the cystoscope is shown first upon bladder phantoms, then upon the living subject in the Clinical Department. A thorough theoretical as well as practical knowledge of gynecology and abdominal surgery in its broadest scope is a prerequisite to graduation from this College, and every opportunity is offered the student to prepare himself for the arduous duties that will come to him in his professional career.

(c) In order to complete this course, one hour each week is devoted to lectures in the College Amphitheater to the Senior class upon the more fundamental subjects embraced in this department. This course is illustrated by charts, drawings, models, and projectoscope, and details measures and methods that cannot, for lack of time, be given in the major operations in the Clinic Operating Amphitheatre.

Professor Bryson (36 didactic hours, 72 clinical hours).

Total, 108 hours.

## **TEXTBOOKS:**

### **Obstetrics:**

Williams; Edgar; American Textbook; Hirst; Wright; Davis.

### **Gynecology and Abdominal Surgery:**

Ashton; Gilliam; Montgomery; Reed; Penrose; Hirst; Byford; Crossen; Kelly's "Operative Gynecology"; "Surgical Diseases of the Abdomen," by Douglas; "Abdominal Operations," by Monynihan.

# *The* COLLEGE *of* LAW

## FOREWORD

The prospective law student should appreciate that his efficiency as a student depends, to a large extent, upon his preliminary education; his success as a lawyer, upon systematic legal training. Instruction obtained from experienced teachers of law will result not only in more thorough, but in more speedy, preparation than the more desultory reading in a lawyer's office. The most noteworthy feature in the progress of legal education in the United States has been the growth of law schools, both in number and in efficiency. Familiarity with the routine work of a lawyer's office is of value to the prospective lawyer, but should be preceded by thorough training in the principles of law. The course of study covered by the law school embraces the entire field of law, and is designed to develop the student and fit him for the active duties of a practicing lawyer.

## Association of American Law Schools

The College of Law, University of Southern California, is a member of the Association of American Law Schools.

## Admission to the Bar

Upon graduation from the College of Law, University of Southern California, the student is granted the degree of Juris Doctor (J.D.) or Bachelor of Laws (LL.B.), and is admitted to the bar upon motion, without examination.

## ADVANTAGES OF LOCATION

The home of the College of Law of the University of Southern California is ideally located, both for the purpose of securing the highest class of instructors and for the convenience and training of the students. It is in the center of hundreds of law offices and close to the courts. The practice of many members of our staff of instruction is such that if teaching should require them to give up the practice of law, no school could pay salaries sufficient to secure their services. To the student of law the Law Library and the lawyer's office are what the laboratory is to the medical student. Many of our Seniors and some of the members of the Freshman and Junior Classes do work in law offices, or at least have office and library privileges.

The quarters in the Tajo building, corner of First street and Broadway, occupy all of the fourth floor, and most of the fifth.

### The Courts

The Supreme Court of the State holds two sessions each year in Los Angeles, and the students have opportunity to hear carefully prepared arguments by the ablest lawyers of the country, and are required to attend Court not less than ten days each semester.

The United States District Court is held here, and opportunity for study of the Federal practice and procedure is thus offered, on both the law and the equity sides.

The Appellate Court for the Southern District of California holds its session in Los Angeles.

The Superior Court of Los Angeles County, consisting of eighteen departments, is in session the entire year.

Four city Police Courts and four Township Justice's Courts, in which students in the Middle and Senior years can get some actual practice before admission to the bar, are in session daily during the entire year.



### **Library Facilities**

Students are allowed the use of the Los Angeles County Law Library, consisting of thirty thousand (30,000) volumes, upon the same terms as members of the Bar.

The College of Law has a good working library of its own, consisting of State Reports, the Reporter System, and Text and other case books, numbering in all 8,000 volumes.

### **EASTERN STUDENTS**

To the increasing number of Eastern students spending a few years in Southern California, special opportunity is given for fitting for the practice of law. Those intending to practice in common-law states should notice that an entire semester is devoted to the study of common-law pleading. **It is the aim to fit the graduates of this College to practice law in any state.**

### **CONDITIONS OF ADMISSION**

**a. Admission to the Freshman Class**—Applicants for admission to the Freshman year must be at least eighteen years of age, and must furnish two certificates of good moral character. Graduates of high schools maintaining a four years' course of study or of other educational institutions whose course is equivalent to such a high-school course, are admitted without examination on the presentation of certificates. Other applicants are required to pass satisfactory examinations in each of the subjects of one of the regular four-year high-school courses.\*

In special cases the Dean has authority to admit as a special student an applicant of advanced years and business experience who has not the required educational qualifications. However, should his preparatory deficiencies be so slight that they can be made up during his first year in school, he may, by permission of the Dean, be thereafter considered a regular student and a candidate for a degree.

---

\*The school reserves the right to refuse to register any applicant or student.

**b. Admission to Advanced Standing.**—Applicants for admission to the Junior or Senior classes must present certificates of the completion by them of work equivalent to that for which they seek to be credited. Certificates will be accepted when issued by a law school belonging to the Association of American Law Schools, or by other colleges of law whose requirements are as high and whose course is as extensive as that here given. Applicants for advanced standing not having such certificates must pass examination in the subjects for which they seek credit, but any student who desires to take such an examination must first secure permission to do so from the Dean. Such examinations are given only at the beginning of a semester. A charge of five dollars is made for each special examination.

## DEGREES

The various courses of study lead to the following degrees:

The degree of Master of Laws (LL.M.) may be conferred upon those students who hold the degree of Bachelor of Laws (LL.B.) from this, or an approved institution maintaining a three years' course of study, and who have completed in this department the fourth year of work prescribed by this College of Law.

The degree of Juris Doctor (J.D.) is conferred upon those students who have received the degree of Bachelor of Arts (A.B.) or a substantially equivalent degree in the University of Southern California or in an approved College or University; who have pursued the study of law in this department for three years and completed in full the curriculum prescribed by this College of Law, or who have completed two years in an approved Law School and taken the third year in this College; and who have maintained a standard of scholarship for the three-year course of at least eighty-five per cent. The A.B. degree must have been secured before entering upon the third year of work in the College of Law.

The degree of Bachelor of Laws (LL.B.) is conferred upon students who are graduates of a high school maintaining a

four-year course of study, or of another educational institution of equivalent rank, who have pursued the study of law in this College for three years, or in any approved Law School for two years followed by one year in this College, completing in full the course prescribed in this institution; and who have maintained throughout a standard of scholarship of at least seventy-five per cent in every subject.

Credit received in Summer Session will count toward such degrees.

When a student in the College of Liberal Arts has received 94 semester credits (including all prescribed work) and of these has taken not less than 32 in the College of Liberal Arts of the University of Southern California, he may enter the College of Law, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years in the professional course, and the degree of Juris Doctor upon graduation a year later. For details, see under College of Liberal Arts.

### PRE-LEGAL COURSE

It is important that the student be thoroughly prepared before commencing the study of Law. It is therefore recommended that he take the three-year Pre-Legal Course as outlined below in the College of Liberal Arts before entering the College of Law.

#### First Year

##### Both Semesters

	Units per Semester
English 1 (Composition).....	3
Economics 1 (Principles).....	3
History 1 (English) .....	2
A Laboratory Science or Mathematics.....	4 or 5
Foreign Language* .....	5

---

\*In cases where Elementary Latin is offered as a college entrance subject, the foreign language may be French or German or Spanish. When not offered as an entrance subject, Latin is prescribed.

**Second Year****Both Semesters**

	Units per Semester
English 30 (English Literature).....	2
Economics 2 and 3 (Money and Banking, Finance).....	3
History 14 (English Constitutional).....	2
Psychology .....	3
Political Science .....	2
Public Speaking .....	2
Foreign Language .....	3

**Third Year****FIRST SEMESTER**

Economics 9 (Municipal Problems).....	3
Sociology 2 (Principles) .....	3
History 16 (American Government).....	3
Logic .....	3
Ethics .....	2
Debate and Argumentation .....	2

**SECOND SEMESTER**

Economics 6 (Labor Problems).....	3
Sociology (Immigration or Criminology).....	2 or 3
History 16 (American Government).....	3
Elective in Philosophy .....	3 or 2
Parties and Governments of Europe.....	3
Debate and Argumentation .....	2

**ATTENDANCE AND SCHOLARSHIP**

The Dean calls attention to the privilege of taking four hours of instruction, free, at the College of Liberal Arts. By taking advantage of this privilege, a student may get selected portions of a college course.

A grade of 75%, or over, on examinations and daily work in each subject, is required for promotion or graduation.

In textbook or case courses in which there is a daily quizz, the daily work counts for 60% and the final examination for 40%.

Absences detract from scholarship. Each time a student is absent he receives a zero mark. If, however, the student files upon return to class a satisfactory abstract of work done during his absence, the zero mark will be advanced to a grade of 50%. Promotion is not granted in any subject where the attendance falls below 75%.

Persons who are not studying for a degree may enter the College of Law at any time as special students and may pursue such studies as they desire. This provision is made especially for the aid of those seeking or holding positions of trust in banks and other business institutions.

Any student displaying deficiencies in English diction or usage may at any time be required to take instruction in the class in Expression.

The school reserves the right to expel any student whenever the Board of Control deems it necessary for the welfare of the College of Law, and to suspend any student or use other methods of discipline, whenever such action is deemed advisable by the Dean.

**Special Examinations.**—Any student taking the regular course who desires to omit class attendance on any subject and to take a special examination thereon, must file in the office a petition asking for the privilege and stating his reasons therefor. The petition is referred to the Dean. If the permission is granted, a special examination may be given. Such examination and all examinations for advanced standing, are given at the beginning of a semester. **Passing grade** upon all such examinations is eighty-five per cent.

## TTE CURRICULUM

The following courses are grouped under four heads: those of the regular session, those of the night school, those of the graduate course, and those in the department for women. In addition, certain courses are offered in the Summer School.



## I. THE REGULAR SESSION

The purpose of the course is to impart a sound and thorough legal education, and to qualify students for admission to practice in all the courts of this or any other State, and in the Federal Court.

The method of instruction is a combination of the lecture, text-book, and case systems, with practical experience in briefing and pleading. Attention is called to the fact that courses are given in Briefing and the Use of Books. In addition to the briefs required in Practice Court work, the members of the Faculty assign subjects for briefs in connection with their respective classes.

On account of the large number of students enrolled, the classes are divided into several sections. These meet at different times of the day, so that students may select a section to suit their own convenience.

All regular students of the law department are entitled to four hours of instruction per week in the College of Liberal Arts without additional cost.

In addition to the subjects listed in the following schedule, special lectures are provided during the year upon subjects which, though not really required in a legal course, are yet of much value to those desiring a well-rounded knowledge of the law.

The duration of each period specified below is one and one-half hours.

### First Year

#### FIRST SEMESTER

Contract (Two Periods).....	Clair S. Tappaan
Criminal Law (Two Periods).....	
.....	Paul J. McCormick and Percy V. Hammon
Elementary Law and Blackstone (Three Periods).....	
.....	Gavin W. Craig
Torts (Two Periods).....	Kemper B. Campbell

Bailments (Two Periods).....Frank M. Porter  
 Debating (One Period)Beulah Wright, Gertrude Comstock,  
     Hugh Neal Wells.  
 Practice Court (One Period)

#### SECOND SEMESTER

Contracts, including Quasi Contracts, Partnership, Agency  
     and Guaranty and Suretyship (Three Periods).....  
     .....Clair S. Tappaan  
 Criminal Procedure (Penal Code and Selected Cases)  
     (One Period)..Paul J. McCormick and Percy V. Hammon  
 Torts (Two Periods).....Kemper B. Campbell  
 Personal Property and Sales (Two Periods)..Frank M. Potter  
 Domestic Relations (One Period).....Vincent Morgan  
 Debating (One Period)..Beulah Wright, Gertrude Comstock,  
     and Hugh Neal Wells.  
 Statutory Interpretation (One Period).....T. W. Robinson  
 Patents (One Period).....F. L. A. Graham  
 Practice Court (One Period)

**Special Elementary Law Class.** During January, of each year a special class in Elementary Law is conducted, beginning immediately after the holidays and concluding before the second semester starts in February. This course is offered particularly for the new students who expect to enroll for second semester work, and affords them an excellent foundation for the new subjects starting at that time.

#### Second Year

##### FIRST SEMESTER

Common Law Pleading (Two Periods).....Victor R. McLucas  
 Private Corporations (One Period).....Frederick W. Houser  
 Real Property (Two Periods).....Kemper B. Campbell  
 Equity Jurisprudence and Procedure (Two Periods).....  
     .....Chas. C. Montgomery  
 Constitutional Law (Two Periods).....James S. McKnight  
 Bills and Notes (Two Periods).....Clair S. Tappaan  
 Practice Court (One Period)

## SECOND SEMESTER

Private Corporations (One Period).....	Frederick W. Houser
Equity Jurisprudence and Procedure (Two Periods).....	
.....	Chas. C. Montgomery
Real Property (Two Periods).....	Kemper B. Campbell
Mining Law (One Period).....	Lewis A. Groff
Wills (Two Periods).....	Victor R. McLucas
Parliamentary Law (One Period).....	Hugh Neal Wells
Research (One Period).....	Wm. Behr
Water Rights and Irrigation Law (One Period).....	
.....	Gavin W. Craig
Practice Court (One Period)	

## Third Year

## FIRST SEMESTER

Code Pleading (Two Periods).....	James G. Scarborough
Evidence (Three Periods).....	Frank M. Porter
Public Corporations (Two Periods).....	Byron C. Hanna
Federal Jurisdiction and Procedure (One Period).....	
.....	Chas. C. Montgomery
Conveyancing (One Period).....	W. S. Allen
Conflict of Laws (Two Periods).....	E. W. Tuttle
Practice Court (One Period)	

## SECOND SEMESTER

Code Pleading (Two Periods).....	James G. Scarborough
Real Property (Two Periods).....	Vincent Morgan
Evidence (Three Periods).....	Frank M. Porter
Damages (One Period).....	Kemper B. Campbell
Insurance (One Period).....	Seward A. Simons
Securities (One Period).....	Gavin W. Craig
Admiralty (One Period).....	E. W. Tuttle
Appeals (Lectures).....	James A. Gibson
Land Titles (Lectures).....	O. R. W. Robinson
Legal Ethics (Lectures).....	Benjamin F. Bledsoe
Bankruptcy (Nine Lectures).....	W. T. Craig
Practice Court (One Period)	

**II. EVENING SESSION**

In response to a general demand for night classes in law, an Evening Session was established at the beginning of the year 1908-1909. The night course consists of the same subjects as the day course, but requires four years and three summers for completion. The instructors are the same as those of the Day School. Graduates of the Evening Session receive the degree of Bachelor of Laws (LL.B.), and under the laws of the State of California are admitted to the Bar without examination.

Only three years of the Evening Session are taught each year, the third and fourth years alternating.

**First Year****FIRST SEMESTER**

Contracts (Two Periods).....	Clair S. Tappaan
Criminal Law (Two Periods).....	Percy V. Hammon
Elementary Law and Blackstone (Three Periods).....	
.....	Gavin W. Craig

**SECOND SEMESTER**

Contracts (Three Periods).....	Clair S. Tappaan
Criminal Procedure (One Period).....	Percy V. Hammon
Bailments (Two Periods).....	Frank M. Porter
Personal Property and Sales (Two Periods).....	Frank M. Porter

**SUMMER**

Domestic Relations (One Period).....	Vincent Morgan
Patents (One Period).....	F. L. A. Graham

**Second Year****FIRST SEMESTER**

Real Property (Two Periods) Taught in 1915 alternating with Torts .....	Kemper B. Campbell
Torts (Two Periods) Taught in 1916 alternating with Real Property .....	Kemper B. Campbell

Private Corporations (One Period).....	Frederick W. Houser
Wills and Probate Law (Two Periods)....	Victor R. McLucas
Bills and Notes (Two Periods).....	Clair S. Tappaan
Debating (One Period).....	Hugh Neal Wells
Practice Court (One Period)	

## SECOND SEMESTER

Real Property (Two Periods) Taught in 1915 alternating with Torts .....	Kemper B. Campbell
Torts (Two Periods) Taught in 1916 alternating with Real Property .....	Kemper B. Campbell
Parliamentary Law (One Period).....	Hugh Neal Wells
Mining Law (One Period).....	Lewis A. Groff
Private Corporations (One Period).....	Frederick W. Houser
Research (One Period).....	Wm. Behr
Bankruptcy (Nine Lectures).....	W. T. Craig
Debating (One Period).....	Hugh Neal Wells
Practice Court (One Period)	

## Summer

Statutory Interpretation (One Period).....	T. W. Robinson
Damages (One Period).....	Kemper B. Campbell

## Third Year

(Offered 1916-1917)

## FIRST SEMESTER

Evidence (Three Periods).....	Frank M. Potter
Conflict of Laws (Two Periods).....	E. W. Tuttle
Equity Jurisprudence and Procedure (Two Periods).....	
.....	Chas. C. Montgomery
Practice Court (One Period)	

## SECOND SEMESTER

Evidence (Three Periods).....	Frank M. Potter
Equity Jurisprudence and Procedure (Two Periods).....	
.....	Chas. C. Montgomery
Water Rights (One Period).....	Gavin W. Craig
Admiralty (One Period).....	E. W. Tuttle
Practice Court (One Period)	



## SUMMER

Federal Jurisdiction and Procedure (One Period).....	
.....	Chas. C. Montgomery
Insurance (One Period).....	Seward A. Simons

**Fourth Year**

(Offered 1915-1916)

## FIRST SEMESTER

Code Pleading (Two Periods).....	Vincent Morgan
Common Law Pleading (Two Periods)....	Victor R. McLucas
Public Corporations (Two Periods).....	Byron C. Hanna
Conveyancing (One Period).....	W. S. Allen
Practice Court (One Period)	

## SECOND SEMESTER

Code Pleading (Two Periods).....	Vincent Morgan
Senior Real Property (Two Periods).....	Vincent Morgan
Securities (One Period).....	Gavin W. Craig
Constitutional Law (Two Periods).....	James S. McKnight
Legal Ethics (Lectures).....	Benjamin F. Bledsoe
Appeals (Lectures).....	James A. Gibson
Land Titles (Lectures).....	O. R. W. Robinson
Practice Court (One Period)	

**III. THE GRADUATE COURSE**

A graduate course of one year is given. Upon those who have previously received the degree of Bachelor of Laws (LL.B.) from this or any Law School that is a member of the Association of American Law Schools or from any other approved Law School maintaining a three-year undergraduate course, the degree of Master of Laws (LL.M.) is conferred upon the completion of an approved course of graduate study equivalent to ten yearly periods.

The following is the course of study leading to the degree of Master of Laws (LL.M.):

International Law (One Period).....	William Hazlett
Spanish and Mexican Land and Mining Law (Twelve Lectures).....	Warren E. Lloyd
Interstate Commerce (Twelve Lectures).....	E. W. Camp
Codification (Twelve Lectures).....	William W. Phelps
Extraordinary and Provisional Remedies (Sixteen Lectures).....	Curtis D. Wilbur
Public Officers (Ten Lectures).....	Walter F. Haas
Logic (One Period).....	Thomas A. Berkebile
Fraternal Insurance (Six Lectures).....	Carlos S. Hardy
Trusts and Monopolies (One Period).....	Arthur P. Will
American Diplomacy (One Period).....	Arthur P. Will
Medical Jurisprudence (Ten Lectures).....	Carlos S. Hardy
Civil Law (Ten Lectures).....	Thomas A. Berkebile
Philosophy of Law.....	Warren E. Lloyd
History of Jurisprudence (One Period).....	Lewis A. Groff
History of Criminal Law (Fourteen Lectures).....	Tanna Alex
California Codes (One Period).....	Byron C. Hanna
Comparative Constitutional Law.....	Thomas A. Berkebile

A thesis of not less than five thousand words is required upon graduation, the subject to be approved by the Dean.

#### IV. THE WOMEN'S DEPARTMENT

Owing to the great interest that women are taking in the study of law, this institution has opened a women's department. Some of the women students are preparing for the practice of law as a profession; others wish to acquire a knowledge of law more as an aid to business and citizenship. This is peculiarly typical of California, where suffrage has been granted to women and they are giving much thought to matters of government and law. For the present year the department will treat separately only three subjects: Criminal Law, Criminal Procedure, and Domestic Relations. In these the women will meet in separate classes, and the recitations will be conducted by women lawyers. Those selected for teachers have had large experience in practice and are well known among the lawyers of the Los Angeles bar.

## V. THE SUMMER SCHOOL

The Summer Session of the College of Law affords to those who expect to earn a part, or all, of their expenses while going through school, an opportunity to lessen the amount of study required for the following year. In addition, it furnishes an opportunity for those who have failed in any subject to make it up, and it also provides a way for those who are irregular, because of having taken a part of their course in some other Law School or for any other reason, to make up back work.

The Summer School lasts about nine weeks, and is conducted by the regular teachers.

The Summer Session of the current year begins June 14, 1915. The following subjects will be taught, reciting five days per week.

The first and second series of the Night School will be taught at the same time.

**Freshman:** Domestic Relations (\$6.00), 7:00 p. m., followed by Patents (\$6.00), 7:00 p. m., followed by Damages (\$6.00), 7:00 p. m.

**Junior:** Bills and Notes (\$10.00), 5:15 p. m. Mining Law (\$6.00), 5:15 p. m.

**Senior:** Real Property (\$10.00), 5:15 p. m.

### Night School:

First Series: Domestic Relations (\$6.00), 7:00 p. m., followed by Patents (\$6.00), 7:00 p. m., followed by Damages (\$6.00), 7:00 p. m.

Second Series: Statutory Interpretation (\$6.00), 7:00 p. m., followed by Federal Jurisdiction and Procedure (\$6.00), 7:00 p. m., followed by Insurance (\$6.00), 7:00 p. m.

If the demand is large enough, other courses will be offered during the summer.

## **THE COURSE IN PUBLIC SPEAKING, VOICE BUILDING, AND EXPRESSION**

A course in Public Speaking, Voice Building, and Expression is offered by Miss Beulah Wright, Dean of the College of Oratory, University of Southern California.

The course is designed to meet the needs of the students of the Department of Law. The work is of the most practical character. It is the aim to teach the student to be simple and natural in his expression and, when occasion shall demand, powerful, but at all times to preserve his individuality. A great deal of stress is laid upon the development of the voice for purity, flexibility, and control.

Most of the work done in class is of an extemporaneous nature, such as short talks on current public questions, argumentation, and debate. Attention is also given to the study and delivery of great orations, as well as to the preparation of original orations.

Students doing work in these classes may receive credit in the College of Oratory to apply upon either the Diploma Course or the Certificate Course. It is possible for a student to complete one of these courses during his three years' work in the College of Law.

## **THE PRACTICE COURT**

Students of the Freshmen Class in the second semester, and members of the second and third year classes, are assigned not less than two cases during each semester, which they are required to conduct through the Superior Court, and two of which must be taken upon appeal through the Appellate or Supreme Courts. Controversies are arranged and assigned upon statements of facts for trial.

All of the steps incident to a contested trial are taken, including preparation of pleadings, argument or motions, and demurrers; preparation of briefs; taking of depositions; impaneling of jury; challenges; introductions of evidence; argument of cases; etc.

Students of the first and second years act as witnesses, clients, and jurors. These trials are presided over by a member of the faculty, and are conducted as nearly as possible in the same manner as trials in actual courts. Each student in the first and second years must write at least three briefs, which are examined and graded by the Judge of the Practice Court.

The Practice Courts consist of the Justice's Court, the Superior Court, the Court of Appeal, and the Supreme Court. The procedure conforms to that of the State of California, with pleadings under the code. Sessions of the Courts are held weekly. A student acts as clerk of the Practice Court, and is at the Law School throughout the day. Tuesday evening of each week is set apart for Practice Court. On each Tuesday evening twelve departments are in session.

## STUDENT ASSOCIATIONS

### The Debating Clubs

The Freshman Debating Classes are under the supervision of the College, and attendance at ninety per cent of the meetings is compulsory on all regular students of the Freshmen Class. The Dean of the College of Oratory directs the work.

The Lyceum is a club having a restricted membership, and is composed of members of the Junior and Senior Classes.

A debating contest, in which all regular students are eligible to participate, is conducted each year. Those securing the first places make up the debating teams that represent the College of Law in contests with other institutions.

The subject for the try-out debates for the year 1914-1915 was: "Resolved, that the Recall should be Abolished in the State of California." These debates were held January 7th and 8th, 1915. There were over thirty contestants. Six debates were arranged for the year. The first was held Feb. 26th at Fargo, N. D., it being the second annual debate between the North Dakota Agricultural College and this College of Law. On March 5th a team was sent from Brig-



ham Young University, Provost, Utah, to debate our local college in Los Angeles. Two debates between Whittier College and the Freshman teams at the College of Law were held March 12th. One of these took place in Whittier, the other in Los Angeles. Another team will come from Denver University for a debate on March 24th. A fourth against the University of Oklahoma will be held in Los Angeles April 7th.

Whittier College and the Freshman teams at the College of Law will be held in April. One of these will take place in Whittier, the other in Los Angeles.

### **The Oratorical Association**

The Law School Oratorical Association is organized for the purpose of stimulating interest in oratory.

Occidental College, Pomona College, Whittier College and the University of Southern California compose an Oratorical Association. Students of the Law Department are eligible as representatives of the University in the contests.

A cash prize of \$75 is awarded the winner of the local try-out; \$15 is awarded the contestant taking second place; and \$10 is given the one taking third place.

A contest is also held between representatives of the same Colleges, called the Peace Oratorical Contest. A cash prize of \$100 is awarded the winner of the inter-collegiate event.

### **Fraternities and Sororities**

The four legal fraternities, Phi Delta Phi, Delta Chi, Phi Alpha Delta, and Delta Theta Phi have chapters here.

The Phi Delta Delta Legal Sorority, Alpha Chapter, was organized here in November, 1911. Since that time other Charters have been granted, making it a national organization. This is the only National Legal Sorority in the United States.

No additional Fraternities or Sororities may be organized without permission from the Board of Control.

**THE ALUMNI MEDAL**

This prize is an unusually elaborate gold medal, which is presented each year at commencement to that member of the graduating class who shall have maintained the highest general average in scholarship throughout the whole College course. This medal was awarded in 1914 to Hugh Neal Wells.

**ATHLETICS**

Regular students of the College of Law take part in all intercollegiate athletic events. The Law School has separate baseball, basketball, football, and tennis teams, and during the past year ranked with the best representatives of the other colleges of Southern California.

**FEEES AND EXPENSES**

Entrance fee (required upon registration).....	\$10.00
Day Session (nine hours or over), per semester.....	45.00
(For less than nine hours a proportionate reduction.)	
Night Session—	
Freshman year (seven hours or over), per semester	25.00
Other years (seven hours or over), per semester.....	30.00
(For less than seven hours a proportionate reduction.)	
Postgraduate course .....	90.00
Diploma fee .....	10.00
Annual student-body assessment (payable on registration) .....	5.00
Special January Elementary Law course.....	10.00
Special examinations, each.....	5.00
Change in schedule more than one week after semester begins .....	1.00

Failure to pay fees when due debars from the classroom.

No refund is made except in case of sickness, and none is made after the middle of a semester.

The prospective student should expect in incidentals, such as athletic meets, debates, oratorical contests, etc., attendance upon some of which may be required, a sum not to exceed \$5.00.

Fees for Expression, Public Speaking and Voice Building,  
per semester:

Class work (60 minutes per week).....	\$10.00
One private lesson per week (30 minutes).....	25.00
One private lesson per week (45 minutes).....	40.00
A course of ten lessons (30 minutes).....	15.00
A course of ten lessons (45 minutes).....	22.50
Single lessons (30 minutes).....	2.00
Single lessons (45 minutes).....	3.00

Students on arriving at Los Angeles can obtain information  
in regard to rooms and board by calling at the office of the  
Law School, 416 Tajo Building.

Although the school cannot agree to secure students posi-  
tions in offices, yet it will assist those who desire to make  
such arrangements, and it may be here stated that ordinarily  
no serious difficulty is experienced in finding such opportu-  
nities.

Address all communications to

FRANK M. PORTER,

College of Law, University of Southern California,

Tajo Building, Los Angeles, Cal.

# *The* COLLEGE of DENTISTRY

## THE BOARD OF TRUSTEES

### Term Expires in 1914

Chas. D. Lockwood, A.B., M.D.

J. W. Gray, D.D.S.

James D. McCoy, D.D.S.

### Term Expires in 1915

Chas. M. Benbrook, D.D.S.

Garrett Newkirk, M.D.

L. E. Ford, D.D.S.

### Term Expires in 1916

Geo. F. Bovard, A.M., D.D., LL.D.

Dr. D. Cave

W. C. Smith, D.D.S.

### Officers of the Board

Chas. D. Lockwood.....President

Garrett Newkirk.....Vice-President

James D. McCoy.....Secretary

J. Walter Gray.....Treasurer

### Executive Committee

L. E. Ford

James D. McCoy

Chas. M. Benbrook

### Educational Committee

L. E. Ford

Chas. D. Lockwood

Garrett Newkirk

## GENERAL STATEMENT

The College of Dentistry of the University of Southern California was organized and formally opened for students eighteen years ago. It is under the control of a Board of Directors and is incorporated strictly as an educational institution without stock, dividends, or profit. The income from whatever source, is expended for instruction and new equipment, which must make for the best educational results.

The Board of Control is composed of members of the Dental Faculty, and representatives of the Southern California Dental Association, the Los Angeles County Dental Society, the Alumni of the College, and the Trustees of the University of Southern California.

As a member of the National Association of Dental Faculties, and the Institute of Dental Teachers, the College of Dentistry has consistently co-operated with these bodies to help place Dentistry upon the high plane it deserves.

The diploma of this College is recognized by all State Boards of Dental Examiners, subject only to such restrictions as govern all dental diplomas in the State in which application to practice is made.

A free clinic for poor school children is maintained in Los Angeles. Free clinics are maintained for the indigent poor, exhibits are located at places of advantage, and public lectures to parents and children are greatly in demand. All these active demonstrations make for better oral hygienic conditions and will mean greater demand for dental service, especially service of a high order.

This college requires three years of thirty-two weeks each to complete the course, which has been adapted to prepare students thoroughly for the practice of dentistry. The technical work is largely performed in the first two years, but a part of the second and all of the third year is given over almost exclusively, outside of the lecture hours, to performing operations in the infirmary, which is open from nine a. m. until five. This affords an unusual opportunity for the devel-



oping of skill in general procedures, and clinical material is so abundant that each student can become familiar with all the various diseases of the teeth and of all the structures of the oral cavity and with their treatment.

### **Environment**

The advantages that accrue to the student from a University located in a metropolitan center such as Los Angeles have already been dwelt upon at some length.\* In addition to these it may be noted that not only does the varied and cosmopolitan population of Los Angeles supply an abundance of clinical material, which this College uses to the very best advantage; but the rapid growth in population of this section of the country opens many opportunities for dental practice, thus enabling our graduates to locate themselves advantageously.

The students of this College, as in other dental institutions throughout the country, come from various walks of life. Each naturally seeks for himself a continuation of his previous environmental conditions. Churches of all creeds and denominations are here in plenty; the Y. M. C. A. has a membership of over 5,000 and extends a cordial welcome to young men who seek the refining influences of this splendid association. The Y. W. C. A., working along the same lines, is ever ready and anxious to serve the young woman. The city has also many clubs, social and political; lodges and societies of all kinds; various places of amusement; and, in fact, all things that serve to relieve the student mind at times from the strain of college work.

### **The Alumni Association**

The Alumni Society of this College is an active and energetic organization, and assists very materially in building up the college spirit and maintaining the good fellowship which prevails in Southern California. The membership is composed of all graduates of the College of Dentistry, University of Southern California, who are legal and ethical practitioners. An annual clinic is held each December, and in addi-

---

\*See Page 11

tion to the interesting demonstrations and scientific papers, there are many pleasant social features. The last annual clinic, attended by over two hundred members, was concluded with the annual banquet of the Alumni Association.

The Alumni Association publishes a quarterly magazine known as the "Alumni Bulletin," which is devoted to the interests of the members and their Alma Mater.

The following are the officers of the Alumni Association for 1913 and 1914:

President, Dr. John C. Hopkins.....	Los Angeles
Vice-President, J. T. Loughan.....	Los Angeles
Sec'y-Treas., Dr. Henry F. Boeckman.....	Pasadena
Board of Directors: S. A. Giguette, Dr. R. C. Lane, Dr. John R. McCoy, Dr. W. E. Sibley.	
Editor of Alumni Bulletin.....	James D. McCoy

### **The College Building and Its Equipment**

The continued growth of the College has necessitated its removal to larger quarters than those occupied during the last nine years.

The new building is located at 16th and Los Angeles streets, in a quiet and healthful neighborhood, convenient to car lines, apartments, and boarding houses, and yet far enough away from the noisy thoroughfares and the distracting elements of down-town life to make study and clinical work less irksome to students.

In planning the new building special attention was given to the problems of lighting, ventilation, and heating, which are of vital importance to the welfare and success of the student.

The Infirmary is a large, beautiful room, with broad high windows. It is equipped with modern, leather-covered dental chairs, and at each operating chair there is a fountain cuspidor with saliva ejector, a glass-top surgical table, a glass-top swinging bracket, gas, and plugs for electric engines, furnaces, sterilizers, etc. A complete locker system in connection with the Operative Clinic furnishes a place for the storing of instruments when not in use.

The Laboratories are all large, well-lighted, and fully equipped. Under the one roof there are rooms for the teaching of every branch of dentistry, even to the dissecting rooms, so that students are not required to leave the building and thus lose valuable time. No expense has been spared in equipping the college with appliances that will add to the student's comfort, and give him modern educational advantages.

The Research Laboratories have every facility for original work, and connected with these are the library and museum, the latter containing many valuable specimens of human and animal crania, specimens of teeth, pathological and otherwise, and many other specimens of great interest and value to the dental profession. The library is sufficiently large, so that any student or graduate who wishes to follow any particular line of study will have opportunity to do so.

Special attention has been given to the oral surgery rooms, where a complete equipment makes it possible for the student to become familiar, under the guidance of experts, with methods of performing the various operations and difficult extractions, a knowledge of which is so essential to the well-educated dentist.

All members and friends of the profession are invited to contribute books, pamphlets, journals, charts, or interesting specimens, such as casts of deformities or irregularities of the teeth and associated parts, or anything that will be useful and instructive. These contributions will be placed in the library and museum, and marked with the names of the donors.

### ADMISSION REQUIREMENTS

**Admission to the Freshman Class.**—Admission to the Freshman class is governed by Rule 1 of the Code of Rules of the National Association of Dental Faculties, which reads as follows:

“Each student seeking admission to any college of this Association shall have completed an accredited high-school course, or shall successively pass an examination the equivalent of such high-school course.

"This examination and verification of all certificates shall be conducted by a state superintendent of public instruction or his appointee.

"Sufficient knowledge of the English language for the easy comprehension of lectures and didactic instruction shall in every instance be demanded of foreign students in American dental schools."

In the event of a student's not having completed his full high-school course, or of his having done special work in high-school, college, or academy, or in the event of an applicant's not being able to furnish satisfactory evidence of having completed a course of study necessary to acquire the required number of points, he may be examined by the Examiner appointed by the Superintendent of Public Instruction of the State of California, whose certificate will be accepted by this College. This Examiner is a resident of this city, and this examination may be taken at any time previous to the student's matriculation. Examinations bearing upon the applicant's preliminary qualifications will in no event be conducted by any person or persons connected with this Faculty or with this institution, but must be conducted by the Examiner appointed by the Superintendent of Public Instruction of the State of California.

Examiner: Professor A. B. Clayton, 1622 W. 39th Street, Los Angeles.

**Admission to Advanced Grades on Certificates.**—This College will receive into the advanced grades of second and third year only such students as hold certificates of having passed examinations in the studies of the first year or second year grades respectively in a school that demands the same or higher preliminary educational requirements, and maintains the same curriculum; except in the case of a student presenting satisfactory evidence of graduation from a reputable medical college, who may be received into the Junior year, provided he makes up such subjects taught in the first year as he has not previously studied.



All students who have successfully passed their examinations for advanced standing and have complied with all the rules of the College of Dentistry will have their certificates given or mailed to them within thirty days after such examinations shall have been completed, such certificates to be pledges to any college to which the holders may apply, that the requisite number of terms have been spent in the College of Dentistry, University of Southern California.

**Special Students.**—Special students may be admitted on such entrance requirements as the Faculty may determine.

They will be required to attend courses they desire to pursue with the same regularity as the regular students, and will pay the regular tuition fee; but no diploma or certificate shall be issued at the close of such special study.

Applicants desiring to register as special students will be required to indicate what subjects they desire to pursue and to present satisfactory credentials for matriculation in said subjects.

### **Special Notice to Students**

Students who present themselves later than ten days after the opening of the session, as published in this announcement, can not receive credit on the course, except in case of sickness, certified by a reputable physician, when the time of admission may be extended to not later than twenty days from opening of the session.

Candidates for admission will not be permitted to matriculate for any session other than that immediately succeeding the date of matriculation.

This College reserves the right to refuse admission to any student or to terminate the attendance of any student, at any time, for what may appear to the Faculty to be good and sufficient cause, as inefficiency, unbecoming conduct, or conduct not conducive to the morale of the class or institution; also, to refuse a student the privilege of any special or final examination, for causes as above stated.



## CURRICULUM *of* STUDIES

### Freshman Year

Osteology: Anatomy, including dissections; Histology, Drawing, Laboratory Work, etc.; Physiology, with laboratory work; Inorganic Chemistry, including laboratory work; Operative, Prosthetic and Crown Bridge Technic; Dental Anatomy.

Examinations held at the end of the year are final in Dental Histology, Dental Anatomy, and General Histology.

### Junior Year

Anatomy, including dissections, and Osteology of the Head; Physiology, including laboratory work; Organic and Physiological Chemistry; Metallurgy with laboratory work; General Pathology; Orthodontia, Didactic and Technic; General and Dental Materia Medica; Dental Pathology; Children's Teeth, Operative and Prosthetic; Crown and Bridge Work; Porcelain, Didactic and Technic; Comparative Anatomy; Prosthetic Dentistry; Operative Dentistry.

Examinations held at the close of the first semester, February 1st, are final in Operative Dentistry, Prosthetic Dentistry, and Crown and Bridge Technic. Examinations held at the end of the year are final in Anatomy, Physiology, Chemistry, Metallurgy, Pathology, General Materia Medica and Comparative Anatomy.

### Senior Year

Dental Pathology; Dental Materia Medica and Therapeutics; Surgery, general and oral, and extractions; Anesthesia; Orthodontia; Prosthetic Dentistry; Operative Dentistry; Dental Porcelain, with Technic work; Radiography; Bacteriology; Children's Teeth; Ethics and Hygiene; Dental Jurisprudence.

**Note.**—Students are advised to defer purchasing textbooks until they meet the various professors and instructors in the classroom and are instructed definitely as to the books required in the different departments.

### REQUIREMENTS FOR GRADUATION

The candidates for the degree of Doctor of Dental Surgery must have attained the age of twenty-one years, and must be of good moral character.

He must have attended three full courses of lectures, of thirty-two weeks of six days each, exclusive of vacations, at some recognized and accredited dental school, the last course of which shall have been taken at this school.

He must complete all technic work prescribed throughout the course, perform all operations, treat all cases, and insert the required number of artificial dentures, crowns, and pieces of bridgework required by the respective professors. All this must be done in the College building, and exclusively by the applicant for the degree. He must have conformed to all the rules of the College and paid all fees. He must pass a satisfactory examination, oral, written, and practical. When these requirements have been met, he will be recommended to the Board of Trustees for the degree of Doctor of Dental Surgery.

The degree will not be conferred upon a student who is not present in person at the commencement exercises, unless excused by the Dean.

### Rules Governing Examinations and Standing of Students

The grades will be estimated upon the scale of 100. The passing mark will be 75; attendance upon infirmary clinics, 80 per cent; lecture courses and laboratories, 80 per cent.

### PRIZES

Forty per cent of the students of each class must compete; otherwise no prize will be given.

1. The Los Angeles County Dental Society Medal is given the Senior who has made the best average on theoretical work during the three years' College course.

2. The Cave Medal is given to the student making the best piece of Prosthetic Technic work.

3. The Ford Medal is given to the student making the best piece of Porcelain Technic work.

4. The LaTouche Medal is given to the student making the best piece of Operative Technic work.

5. The Eshelman Medal is given to the Freshman student who has the best Technic work for the year.

### The A. Halden Jones Chemical Prize

A prize of \$25.00 is offered to the student presenting the best thesis on his choice of certain selected subjects in Chemistry and Metallurgy. These subjects will be announced in the catalogue each year. The thesis must embody the results of some original work on the part of the student. Every assistance will be given those competing for this prize. The resources of the chemical department will be placed at their disposal. The prize is offered on condition that at least six students shall compete in the given year.

The subjects for the year 1914-1915 are the following:

I. The difference in behavior between hydrogen ions and other ions in the production of pain in sensitive cavities.

II. The advantages of embodying the oxides of certain metals with zinc oxide in zinc oxyphosphate cement.

III. The possibilities of organic dental cements, especially of the casein formaldehyde type and the camphor-nitro-cellulose type.

## DEPARTMENTS *of* INSTRUCTION

### OPERATIVE DENTISTRY

A. C. LaTOUCHE, Professor

M. EVANGELINE JORDON, JOHN C. HOPKINS, Associate Professors

In this department the student is instructed in the latest methods of operative procedure, the fundamental principles being taught in the Freshman and Junior Technic courses.

All of the different conditions, materials, and methods of manipulation are considered, so that the student, when graduated, is competent to enter active practice and give his patients the very best of dental service. In order to develop the judgment and diagnostic ability of the student, the

Seniors during the second semester are required to study each case presented to them in the Infirmary. When they have decided upon the best method of procedure, they call one of the instructors, who will confirm or correct their opinion.

If qualified at the beginning of the second semester, the Junior students are admitted to the Infirmary for practical operations.

A very thorough course is given in the preparation of cavities and the construction of porcelain and gold inlays.

In connection with this department, Professor Jordon will give a course of lectures on the Care and Management of Children's Teeth. This course will consider pre-natal influences, and the nutrition and development of the child as relating to the teeth; the treating, filling, and extraction of children's teeth; the disturbances found in the oral cavity incident to the first dentition; and the management of children in the office.

## OPERATIVE TECHNIC AND DENTAL ANATOMY

A. C. LaTOUCHE, Professor

J. T. PARKER, Demonstrator

It is our aim to make this department one of the strongest in the College. The object of this course is to afford a thorough technical training in operative procedures, preparatory to practical work in the Infirmary; to develop manipulative skill and to give the students an intimate knowledge of the tissues upon which they are to operate and of the physical qualities and adaptation of the materials to be used, and to secure facility in the use of instruments by systematized practice upon teeth out of the mouth.

Special attention will be given to a study of pulp chambers and root canals, their number, size, and form, and their relation to the outer surface of the teeth. Sections of the natural teeth will be prepared by each student in such a manner that these features will be clearly shown.

The student will construct model tooth forms of natural teeth, upon which operations will be performed as in actual practice. This will consist in the preparation of cavities and a study of their classification and forms; the study of enamel and the direction of cleavage on different parts of the crowns of the several teeth with special reference to the best form and finish of margins of cavities for filling; the cutting of dentine and the various methods employed in anchoring fillings; the removal of carious tissue; the management of pits and fissures; and the general shaping of the cavity. Instruction will also be given in the application of the rubber dam, the methods employed in gaining space, the use of clamps, wedges, separators, etc. In conjunction with practice in cavity preparation, there will be a study of filling materials and their manipulation. This course is designed to ground the student thoroughly in the principles of operative filling, and to prepare him to prosecute intelligently the practical work of the Infirmary.

### **PORCELAIN**

**B. F. ESHELMAN**, Professor

**H. C. KING**, Lecturer

**MARK KELSEY, J. C. HOPKINS**, Demonstrators

Porcelain is attracting more and more attention. It is the most artistic method of restoring teeth or parts of teeth. Cavities in the natural teeth can be filled with porcelain inlays, which so accurately imitate nature as to be undetectable to the naked eye.

Students of this school will be expected to attain a high degree of proficiency in the manipulation of porcelain. The College is equipped with Townsend, Hammond, and Custer electric furnaces, and with a large oil furnace for continuous gum work. Students are taught how to construct inlays of high- or low-fusing porcelain, and porcelain crowns and bridges, with special attention to the different blending of colors. A complete course of lectures is given covering the entire subject.

Opportunity is afforded the Seniors and Juniors for making a technical continuous gum case.



## COMPARATIVE DENTAL ANATOMY

I. D. NOKES, Lecturer

This course involves a comparison of the teeth of man with those of the lower orders of animal life. Evolution, with the part that variation plays in determining the character of a given organ, is studied. The students prepare specimens under the guidance of the teacher. The course is made more interesting and instructive by the large collection of specimens and the complete line of lantern slides that are used for illustrating the lectures.

The course is strengthened and enlarged by the complete equipment and facilities that the new building affords.

## PROSTHETIC DENTISTRY

C. J. R. ENGSTROM, Professor

E. LESLIE EAMES, Senior Demonstrator

FRANK G. STALEY, Demonstrator

Realizing that there is no branch of dentistry in which students are ordinarily so deficient as in the prosthetic department, we have aimed to develop a practical working course to the end that our graduates may be able to do this class of work in a practical and artistic manner.

From an artistic standpoint we teach the higher possibilities of the art of restoring the features of the face, together with the staining and grinding of the teeth to meet the conditions of the individual type of the patient.

The fundamental principles of atmospheric pressure, leverage, etc., are dwelt upon, enabling the student intelligently to meet the conditions presented in difficult cases. Both technical and practical dentures of all kinds are made, such as vulcanite, celluloid, aluminum, Watts metal, weighted rubber, gold, and porcelain continuous gum. Both practical and technic interdental splints are made for fracture cases, as well as obturators and velums for cleft palate cases. Moreover, as a dentist may be called upon to restore loss of tissue adjacent to the oral cavity, the course includes the making of celluloid ears and noses.

An overabundance of Infirmary patients, together with all modern appliances for doing the work under the direction of the most competent of professors and demonstrators, enables the student to develop a high degree of skill in this department.

## DENTAL ANATOMY

A. C. LaTOUCHE, Professor

J. T. PARKER, Demonstrator

The student takes up the study of nomenclature, followed by descriptive human dental anatomy, the arrangement of the teeth, and the structure of the root canals. Drawings and the making of cross-sections of the various teeth enter into this course. Lantern slides in large numbers are used to facilitate the study of this important branch of the curriculum. This method will be of material benefit to the student, as the different surfaces of the tooth will be enlarged upon the screen.

## ORAL SURGERY AND ANESTHESIA

CHAS. D. LOCKWOOD, Professor

DAVID D. THORNTON, Lecturer

R. C. LANE, E. F. TOLAN, LOUIS FELSENTAL, P. P. SEWELL,  
Assistants

The work of this department will be made as practical as possible for dentists. Special stress is laid upon the diagnosis of surgical diseases and injuries of the face, mouth, and jaws. The course will consist of:

1. Didactic lectures given weekly by Dr. Lockwood.
2. A weekly quiz, with a textbook as a basis, given by Dr. Thornton.
3. Operative clinics, demonstrating methods of diagnosis and treatment, three hours weekly at the County Hospital.

**ORTHODONTIA AND RADIOGRAPHY**

**JAMES D. McCOY**, Professor  
**JOHN R. McCOY**, Demonstrator

1. **Orthodontia.** Lectures, illustrated by lantern slides, Demonstrations and Technic.

During the Junior year the principles of Orthodontia are taught, special attention being given to occlusion, etiology and classification of malocclusion, diagnosis and treatment.

In the Senior year a series of practical demonstrations and clinics will be given.

2. **Radiography and the X-Ray.** Lectures and practical demonstrations. The principles of Radiography, with instructions for the use of the X-Ray in dentistry, will be given during the Senior year. The College is equipped with the apparatus necessary to familiarize the student with the practical as well as with the theoretical side of this important subject.

**DENTAL PATHOLOGY**

**JULIO ENDELMAN**, Professor  
**H. PAGE BAILEY**, Assistant

The instruction in this branch will consist of two lectures each week to the Junior and Senior students, embracing a study of all pathological conditions of interest to the dental practitioner, together with a general application of the therapeutic agents indicated in the treatment of such conditions.

The didactic work is supplemented by clinical work in the College Infirmary, under the direct supervision of the professor and his assistants. Every possible deviation from the normal, functionally or organically, is closely observed and the student is made to familiarize himself with every phase of oral and dental pathology. He is daily confronted with problems in dental pathology which he is made to study individually, the results of his observations being submitted to those in charge of this department for final criticism. The study of disease processes and the instituting of rational cura-

tive measures being the keynote of a successful practice, to this department of the curriculum is given the undivided attention of the Chair.

## **EXTRACTION AND ANAESTHETICS**

ROY L. SPENCER, Lecturer  
C. J. APABLASA, Clinical Instructor

This course embraces a series of lectures upon the principles and practice of extracting. With a well equipped extracting room and abundant clinical material, the student is afforded ample opportunity of becoming skilled in this work. This course is given in the Senior year.

## **ANAESTHESIA: GENERAL AND LOCAL**

JULIO ENDELMAN, Professor  
ROY L. SPENCER, Lecturer  
JOHN C. HOPKINS, C. J. APABLASA, Demonstrators

The wonderful development in the field of anaesthesia, and which has been brought about in the past three years through the efforts of investigators in the medical and dental professions, constitutes the reason for the establishment of a department exclusively devoted to the study and practice of all methods of inducing general and local insensibility to pain. Infiltration anaesthesia, conductive anaesthesia, intra-osseous anaesthesia, nitrous oxid-oxygen anaesthesia, etc., are some of the methods with which the student is made familiar invariably under the immediate supervision of a member of the staff.

## **DENTAL JURISPRUDENCE**

INGLE CARPENTER, ESQ., Lecturer

The lectures on Jurisprudence treat of the qualification and duties of expert witnesses; the importance of dental records, etc., as a means of identification; the limitations of dental practice; the qualifications required, and the liabilities incurred, by those who administer anaesthetics; the penalties

that may be suffered, and the defenses to be made, in cases of real or supposed malpractice, and the liability in case of infection from instruments; the requirements of the California law and of the laws of other States respecting the practice of dentistry; the steps necessary to become practitioners; the rights and liabilities of dentists with reference to the laws regulating their professional practice; the laws of contract with reference to dealings between dentist and patient, and rights of action and possible defenses arising therefrom; partnership liabilities; etc.

## PHYSIOLOGY

J. W. REEVES, M.D., Professor  
JULIUS R. HAMILTON, Lecturer  
EARL MOODY, Assistant

The courses in Physiology is given during the first and second years. The work consists of a systematic course of lectures, recitations, and demonstrations. This College has a complete Physiological Laboratory equipment.

The subject of cells, tissues, blood, and the circulatory system are first taken up, and later the course is devoted to the study of the alimentary canal, excretory organs, the nervous system, the organs of special sense, and the organs of reproduction.

Bearing in view the fact that the dentist is a specialist in the treatment of diseases in an area of the human body which plays so important a part in the maintenance of the general nutritional balance, the course is so graded as to result at the end of the Junior year in the acquirement by the student of a degree of proficiency which shall enable him thoroughly to understand the functional and nerve mechanisms of all the tissues and organs of the body. The strictest attention to the individual requirements of the student is in this, as in other departments of the curriculum, an object paramount in the efforts of the professor and assistants.



**PROFESSIONAL ETHICS AND HYGIENE****GARRETT NEWKIRK, Professor**

Professor Newkirk delivers a course of lectures on these important subjects. The personal and ethical conduct of the student before and after his graduation have quite as much to do with determining his standing and success in the community as do his knowledge and technical skill. Hygiene as relating to the preservation of the dentist's own health, hygiene in the dental office, oral hygiene—all these divisions of the subject are carefully considered.

**CROWN AND BRIDGE WORK****C. J. R. ENGSTROM, Professor****E. LESLIE EAMES, FRANK G. STALEY, Assistants**

Crown and bridge work pertains both to operative and prosthetic dentistry, and yet it occupies such an important field that the College has deemed it wise to make it a separate department.

Students receive a complete course in Crown technic, as well as lectures, during their Freshman year. Juniors receive a complete course in Bridge technic during the first semester, and do practical work in the Infirmary during the remainder of the year. Seniors perform practical work in the Infirmary. The principles of construction of all of the various forms of crowns and bridges at present in use is taught, and a study is made of the stress applied by the muscles of mastication to the teeth, both singly and collectively, with its bearing upon crown and bridge construction, including the conditions under which bridges should or should not be used. The clinical demands are excellent, requiring porcelain and gold crowns and bridges.

**GENERAL AND DENTAL MATERIA MEDICA AND THERAPEUTICS****GEO. H. WALKER, Professor**

The work for the Junior class consists in a study of definitions, the use of abbreviations and terminology, the source of drugs in nature, preparations made from crude drugs,

methods of administering medicines and agencies, classification of drugs, their physical, chemical, and poisonous properties, dosage, antidotes, and therapeutic application. Special attention is given to those drugs that are peculiarly valuable in the practice of dentistry, and the course is so planned that the student may receive a practical knowledge of the application of dental medicine in his every-day work. One lecture a week.

In the Senior year the work of the Junior year is carefully reviewed in a systematic way, and thereafter a special course of lectures is given relating to the latest and best approved methods in the application of medicines to the treatment of those pathological conditions of more than usual significance to the dentist. One lecture a week.

## CHEMISTRY

A. HALDEN JONES, Professor

### I. General Chemistry:

The general principles of inorganic chemistry are reviewed, especial stress being laid on physical chemistry. Then the study of the elements and their compounds is taken up; first, the non-metals, most of them being prepared in the laboratory; second, the metals, the application of the principles of chemistry and metallurgy in the dental profession being continually borne in mind. Qualitative analysis is begun. The course involves lectures, demonstrations, the study of textbooks, and laboratory work.

### II. Metallurgy:

In this course only those metals are considered that are of importance to the dentist. These are studied with reference to their physical and chemical properties, their separation and refining, and their identification. The student is given unknown compounds of these metals and required to identify both metal and acid radical. The chemistry of the mouth and of salivary digestion is considered both in the lecture room and in the laboratory. The course concludes with the

student's preparing several organic compounds in everyday use in his profession—such as chloroform, aristole, iodoform, etc.

### III. Original Work:

Any student wishing to do work along special lines is encouraged to do so, and the resources of the department are placed at his disposal. The possibility of new and better alloys, cements, oral antiseptics, etc., is suggested.

## ANATOMY

W. R. MOLONY, Professor

MELVIN ELLIS, Associate Professor

WAYNE P. HANSON, EDWIN H. SCHNEIDER, Demonstrators

**Anatomy I.** In this course the anatomy of the bones, joints, blood vascular system, peripheral nervous system, thorax, abdomen, and their viscera are studied. Special emphasis is laid upon points of practical importance. Lectures, recitations, and demonstrations twice a week, first semester of the Freshman year.

**Anatomy II.** Dissection and demonstrations of at least one part of the cadaver. The student is shown the proper method of making careful and accurate dissections, particular attention being paid to thoroughness and the relation of parts. Twice a week, second semester of the Freshman year.

**Anatomy III.** Lectures twice a week followed by recitations upon the same. Special attention is given to the anatomy most intimately associated with the practice of Dentistry. Two lectures a week followed by recitations, first semester of the Junior year.

**Anatomy IV.** Dissection and demonstrations of the head and neck. Two lectures a week followed by recitations, second semester of the Junior year.

**Text Books:** Cunningham, Piersol, Gray, Spateholtz, "Atlas," Sabotta, "Atlas of Descriptive Anatomy."

**GENERAL PATHOLOGY****ETHEL LEONARD, Professor**

This course of lectures and laboratory demonstrations is given throughout the Junior year. The principles of General Pathology are thoroughly studied, and each student is required at intervals to discuss certain assigned topics before the class. Written reviews, quizzes, and the demonstration of gross and microscopical specimens are the features of this course.

**Text Book:** Green's "General Pathology."

**BACTERIOLOGY****ETHEL LEONARD, Professor**

Bacteriology is taught by means of lectures and laboratory demonstrations throughout the Senior year. A comprehensive and practical discussion of the common infectious diseases is given, with especial emphasis on those diseases that show their effect on the mouth and teeth. Cultures are made of pyorrhoea cases, and the bacteria isolated and studied. The bacteriological laboratory is equipped with oil immersion microscopes, a thermostat, and proper facilities for studying bacteria.

**GENERAL AND DENTAL HISTOLOGY****ETHEL LEONARD, Professor**

The first semester of the Freshman year is given to the subject of General Histology. Four hours laboratory work and two hours lecture are required to complete the course. The elementary histological structures, especially those about the head and oral cavity, are studied thoroughly, each student mounting about fifty microscopical specimens.

Dental Histology is taught during the second semester. Embryos' heads which show all the phases of development of the teeth are used in this course, each student preparing

his own sections, and making drawings of typical phases of development. Special time is devoted to the preparation and study of the hard tissues, which are prepared by the grinding machine, so that each student may learn minutely the structure of bone, enamel and dentine.

This histological laboratory is equipped with thirty-five Bausch and Lomb microscopes, a McIntyre projection, and other necessary apparatus.

**Text Books:** Shafer's "Essentials of Histology"; Tome's "Dental Anatomy."

### INFIRMARY

Our Infirmary and clinical facilities are of the best. The room is large and beautiful, and is equipped with all modern conveniences. The number of patients who apply for services is phenomenal, thus affording unusual facility for practical education. From this great clinic we are able to select for the student all of the operations in any given line in which he may desire to specialize, or in which he feels that he needs extra experience and practice.

The lecture schedule has been arranged in such a manner that the students can work with little interruption from nine in the morning until four in the afternoon.

In charge of the work as professors and demonstrators are a number of teachers of experience and ability. The student has the advantage of personal contact with these competent men.

With the exception of legal holidays, the Infirmary is open the year round. There is no extra charge for the Summer Clinical Course. While it is not a requirement, the student is advised to spend as much time of the vacation period as he possibly can in the actual practice of dentistry in the Infirmary. This course is very advantageous to the student, as it enables him to put in four months of practical work without any interruption from attending lectures.



**SCHEDULE OF FEES**

Fees are payable in two equal installments—October 15th and February 1st.

No student will be admitted for less than the stated fees.

**Freshman Year:**

Matriculation fee .....	\$ 5.00
Lecture ticket .....	170.00
	<hr/>
	\$175.00

**Junior Year:**

Matriculation fee .....	\$ 5.00
Lecture ticket .....	170.00
	<hr/>
	\$175.00

**Senior Year:**

Matriculation fee .....	\$ 5.00
Lecture ticket .....	170.00
	<hr/>
	\$175.00

These fees include dissecting and all laboratory fees.

**Cost of Books and Instruments**

Before beginning his work, each student will be required to procure the instruments necessary for his use.

All of the books and instruments employed are needed after graduation. The outfit includes a dental engine, and enables the student to start practice, on finishing his course, without much additional expense for instruments. A list of the instruments is furnished the student on his arrival. The approximate cost is as follows:

Freshman year .....	\$125.00
Junior year .....	135.00
Senior year .....	85.00

Students are not admitted to class work and the Infirmary until after purchasing the required books and instruments.

Students are advised to defer purchasing textbooks until they have met the various professors and instructors in the classroom and have been instructed definitely as to the books required in the different departments.

### **Additional Items of Information**

All fees due the College are paid to the Treasurer at his office.

The matriculation fee must be paid to the Secretary before the name of a student will be recorded.

There will be no return of fees by reason of suspension or expulsion.

When the student is obliged to withdraw from the College before the last four weeks of a session for no misdemeanors, but for good and sufficient reason, to be determined in all cases by the Faculty, he is entitled to a remission of three-fourths of the amount due for that portion of the time during which he receives no instruction; this remission to date from the reception by the Dean of a written notice of the student's withdrawal from the College.

Graduate dentists are admitted to the Infirmary for a smaller fee where the degree is not taken.

The student can live in Los Angeles as in other large cities, according to his means or his habits of life. Good room and board near the College may be had for \$20.00 per month.

Laboratory benches and operating chairs are assigned to students in the order of matriculation, and each student is required to employ the same throughout the session.

Operations in the technic departments of the school require a large number of natural teeth, and a sufficient supply is sometimes difficult to procure. Students will therefore find it to their advantage to bring all the extracted teeth they can obtain.

Alumni and friends of the College are requested to send to the College boxes of extracted teeth. The College will be grateful for such favors and will gladly pay all express or other charges on such packages.

Blank forms for application for admission will be sent by the Dean on request.

Address all communications to the

COLLEGE OF DENTISTRY

University of Southern California

Lewis E. Ford, D.D.S., Dean

Sixteenth and Los Angeles Streets, Los Angeles, California

# *The* COLLEGE *of* THEOLOGY

## HISTORICAL

The Southern California Annual Conference of the Methodist Episcopal Church, at its first session in 1876, gave earnest thought to the subject of Christian education. In that year the Conference recognized a school that had been established by the Reverend and Mrs. O. S. Frambes and adopted it as the "Los Angeles Academy."

In 1879 the Conference decided to organize the University of Southern California and elected its first Board of Directors, and in 1880 the trustees of the Academy closed the school and transferred its property to the University. In September of that year Bishops Wiley and Simpson laid the corner stone of the first University building (the one now occupied by the department of Civil Engineering), and in October the doors were opened to students in the University of Southern California.

In 1884 the Committee on Education reported to the annual conference a resolution recommending "Our Theological Schools at Boston, Madison and Evanston," and hoping that "the day may not be far distant when we can add this department to our own University." Through the generosity of the Honorable Charles Maclay of San Fernando, California, this hope began to be realized the next year. The University Year Book, 1855-6, reports a three-story brick building 70x90 feet in dimensions, and a campus of ten acres, as the equipment of the "Maclay College of Theology."

Its first Dean was the Reverend R. W. C. Farnsworth, taken for this place from the Presiding Eldership of the Los Angeles District. The appointment of the Reverend Fletcher B. Cherrington, A. M., and the Reverend James Blackledge, A. M., completed the initial Faculty and the College opened.

On the death of Dean Farnsworth, the Reverend F. B. Cherrington was appointed Acting Dean for the remainder of the school year. The Reverend R. S. Maclay, D. D., veteran missionary from the Orient, and brother of Senator Charles Maclay, was then called to the headship of the College that bears his name. When advancing years and failing health caused the resignation of Dr. Maclay, the Reverend George Cochran, D. D., was elected to succeed him. Through this period the new School of Theology did excellent work, coming about the time of the succession of Dr. Cochran from its home in San Fernando to the immediate neighborhood of the College of Liberal Arts in Los Angeles.

In the hard times of 1893 the Trustees thought it expedient to close the Maclay College until its resources should warrant the continuance of its work.

In 1907, on the urgent request of the Annual Conference, the Trustees of the University decided to re-open the School of Theology, and upon request of the Board, Ezra A. Healy, D. D., just completing his seventh year in the pastorate of the University Church, was assigned to the task of reorganizing Maclay College and was appointed Dean. The first class under the new regime was graduated in 1911.

## COURSES *of* INSTRUCTION

It is the aim of the College of Theology to do all that is possible to furnish the churches of our constituency with preachers who shall be at once scholarly and evangelical, and pastors who shall be apt and successful in their difficult work.

In pursuance of this aim the following courses are arranged with the specified conditions of admission:

1. **The Degree Course.** A three years' course for students who have obtained the A.B. degree. The completion of this course will entitle the graduate to the degree of Bachelor of Divinity.



**2. The Diploma Course.** This is also a three years' course, open to students who have the equivalent of junior standing in the College of Liberal Arts, including the completion of all the required courses. The Maclay College Diploma will be granted to graduates in this course.

**3. The English Course.** Applicants who have graduated from High School, or who, on examination, are found to have done work equivalent to the full college entrance requirements, may be admitted to this course, and on its satisfactory completion will receive a certificate of graduation.

**4. Special Students.** Applicants will be admitted as special students to classes that, in the judgment of the faculty, they can enter with advantage, and certificates will be given for all subjects satisfactorily taken.

## COURSES

### Classical Course

#### (Degree)

#### Junior Class

Hebrew  
Elementary Greek  
Biblical Introduction  
Systematic Theology  
Church History

#### Middle Class

Pastoral Theology  
Hebrew  
New Testament Greek  
Exegesis  
Systematic Theology  
Pastoral Theology  
Church History  
Sociology

#### Senior Class

Hebrew  
New Testament Greek  
Systematic Theology  
Pastoral Theology  
Apologetics  
Sociology  
Sacred Oratory  
Missions in the Orient  
Modern Missions  
Comparative Religion

### Greek-English Course

#### (Diploma)

#### Junior Class

Elementary Greek  
Biblical Introduction  
Systematic Theology  
Pastoral Theology  
Church History

#### Middle Class

Greek Testament  
English Exegesis  
Systematic Theology  
Pastoral Theology  
Church History  
Sociology

#### Senior Class

Greek Testament  
Systematic Theology  
Pastoral Theology  
Apologetics  
Sociology  
Sacred Oratory  
Missions in the Orient  
Comparative Religion  
Modern Missions

### English Course

#### (Certificate)

#### Junior Class

Biblical Introduction  
Systematic Theology  
Pastoral Theology  
Church History  
English Literature and  
Expression

#### Middle Class

English Exegesis  
Systematic Theology  
Pastoral Theology  
Church History  
Sociology  
English Literature and  
Expression

#### Senior Class

Systematic Theology  
Pastoral Theology  
Apologetics  
Sociology  
Sacred Oratory  
Missions in the Orient  
Comparative Religion  
Modern Missions  
English Literature and  
Expression

As will be seen by reference to the accompanying table undergraduates in the Annual Conference find here that nearly all the subjects required in the Conference Courses may be taken in the regular college classes. The student, therefore, has the great advantage of substituting drill, question, and preparation of papers for solitary reading.

## DEPARTMENTS *of* INSTRUCTION

### APOLOGETICS

The whole subject of the defensive facts and proofs of Christianity is included in this general term. Primarily it is found in the courses in the English Bible, given by Professor Hill, including Hermeneutics and Christian Evidences. Historical and Systematic Theology contribute to the full equipment of the student in this field.

### BIBLICAL INTRODUCTION

JOHN G. HILL, Professor

This course, which deals primarily with Christian Evidences and the Foundations of Faith, will take up those phases of thought and facts of life that confront the student of today—the idea of God and the divine immanence; man and the legitimacy of the religious principle in the human constitution; the Bible as a revelation of God's relation to and purpose concerning man's life and destiny; the facts of conversion and the history of Christianity as witnesses to the divine origin of the system; and a consideration of the assumptions of modern cults that oppose or offer themselves as substitutes for Christianity.

### RELIGIOUS EDUCATION

J. H. MONTGOMERY, Professor

A course designed to fit the student for teaching Bible classes in Sunday Schools, teacher-training courses, etc. The course considers the teacher, his work, qualifications, and preparation; the student, his physical, mental, and moral nature; the lesson; the teacher's approach to the student, etc.

**CHURCH HISTORY**

.. **GEORGE W. COULTAS**, Professor

The first year begins with the doctrinal development of the early Church, its controversies and councils; the adoption of the Church by the State, and the result; the rise of the Holy Roman Empire, and the organization of the Papacy. It discusses the great men of the early Church and the later Popes and rulers that enter into its life; the causes and results of monasticism and the Crusades; the rise and spread of Mohammedanism; Scholasticism and the Renaissance; and the pre-Reformation men and movements. Epochs are dealt with, and an attempt is made to lead the student to study the great formative movements, and to relate one event to another, and thus to study advances and reactions. The history of doctrine is reviewed, with special attention to those tenets having far-reaching results.

The second year begins with the Reformation and traces its development under its various leaders. The English Reformation is followed from Wycliffe to the period of the Commonwealth. French Infidelity, German Rationalism, and English Deism are considered in their relation to later religious movements. The denominations, the missions, the cults, and the forward and reactionary movements of England and America are discussed.

The third year carries forward the investigations of the second with special reference to the religious and church history of the present day.

**FOREIGN MISSIONS**

**ROBERT J. TAYLOR**, Professor

This course of lectures deals with the History of Missions in all lands. The study comprises the periods of preparation for modern missions; the present conditions in non-Christian mission-fields; men and methods in missionary work; a survey of the Methodist Episcopal Missions; the problems of specific fields; the extent of occupancy; and the qualifications and types of leadership needed in different countries.

Students who anticipate work in the foreign field will find this course an excellent preparation for further pursuance of their studies of Oriental questions in the special department of which Dr. James Main Dixon is the Director.

### **ENGLISH LITERATURE AND EXPRESSION**

This very important part of a preparation for the ministry is given a prominent place. In addition to the forty-five courses in the English Department of the College of Liberal Arts, special opportunity for study and training in interpretation and expression is afforded in the College of Oratory, which is conveniently located near the Maclay College.

Classes are conducted by the Dean in "Principles of Literary Criticism" in the first semester, and in "English Style in Public Discourse" in the second semester.

### **SACRED ORATORY**

**LEONARD G. NATTKEMPER**, Associate Professor

In the Senior year, in each course, a minimum of two hours per week in both semesters is required in this department. The work includes instruction and practice in public speaking, and careful training in the reading of the Bible and of hymns.

### **NEW TESTAMENT GREEK**

**ELEANOR A. GARDNER**, Instructor

1. **Beginning Greek.** Those who have had no previous training in the Greek language will register for Course 1 in the College of Liberal Arts.

2. **The Gospel according to John** will be studied as a basis for mastering the language of the New Testament. Harper and Weidner's "Introductory Greek Method" will be used throughout the year. Four hours; first semester.

3. **The Synoptic Gospels**, with special study of Mark; Matthew and Luke as related to Mark. The Synoptic Gospels as compared with John. Four hours; second semester.

**HEBREW LANGUAGE AND HISTORY****JAMES BLACKLEDGE, Professor**

The main object of instruction in this department is the securing of a good reading knowledge of the Hebrew text; hence during the first two years of the course special attention is given to oral class-reading exercises, the fundamental principles and rules underlying the Hebrew language, and the origin of grammatical forms, with some exegetical study during the second semester of the second year. The method employed aims, by constant review and frequent composition exercises, to make an otherwise dry subject as interesting as possible.

The greater part of the first two years is devoted to the study of the text of the Pentateuch. During this time the student is requested to look up the inscriptions of Israel's neighbors—the Assyrians and Babylonians—in the library, as an aid in the study of the text. The latter half of the course will be largely devoted to exegetical studies, studies in Messianic prophecy and in the minor prophets, and a critical study of the Book of Job. During the last semester there will be grammatical, critical, and exegetical studies of selections from the Book of Psalms. During the entire course occasional lectures will be given on the Old Testament and related subjects.

The effort is, not to read meanings into the passages considered, but to get the original author's exact viewpoint. This is often a most difficult task, and calls for the application of modern scientific methods of exegesis. To obtain the exact idea intended by the author, the interpretative principles, methods, and rules must be learned and applied. Some knowledge of the Greek language will be helpful. Prerequisites, Bible 1, 2, 3, 4. Two hours throughout the year. Tuesday and Thursday (hours to be arranged).



**HOMILETICS AND PASTORAL THEOLOGY****JAMES ALLEN GEISSINGER, Professor**

The whole range of the life and work of a minister of the Gospel passes under review in these courses, which continue throughout the three years. The call and commission of the preacher, the history of preaching with notice of some of the eminent preachers of the past and the present, doctrinal preaching, evangelistic preaching, the pastor and the Sunday School, the minister and social problems, church organization, the institutional church, pastoral visitation, and kindred subjects, will all have the consideration that their importance demands. In the special department of Homiletics the written sermon, the extemporaneous sermon, and the exercise of preaching before the student body will have prominent place.

**SYSTEMATIC THEOLOGY****Dean EZRA A. HEALY**

In the Junior year the textbook is Curtis' "The Christian Faith"; in the middle year Sheldon's "System of Christian Doctrine." While these works form the basis of study for the students out of class, a wide reference to authors, old and new, is encouraged, and all is supplemented by lectures and questions in the classroom hour. In the Senior year research in the library and in current theological literature, with essays on assigned subjects, and a continued attendance in the lecture room, will complete the work in this important field.

The earnest and consistent aim of this department is to discover, maintain and defend the essentials of the Christian system. A solid Biblical basis is sought for every doctrine. Special centers of study are the Deity of the Lord Jesus, the Atonement, and the Salvation which is by Faith.

**EARLY ENGLISH BIBLE AND ORIENTAL MISSIONS**

JAMES M. DIXON, Professor

**Old English Prose.** The Gospels and Psalms in West Saxon, with grammatical training in etymology and syntax. Two units; both semesters.

**Christian Missions in the Orient since the days of Xavier.** The lives and work of Cary, Martyn, Duff; John Williams; the Judsons; Robert Morrison, William Burns; Verbeck, Nicolai. Two units; second semester.

**Hymnology.** A study of Hymns, ancient and modern, with critical discussions. Two units; second semester (alternate with Christian Missions).

**SOCIOLOGY**

ROCKWELL D. HUNT, EMORY S. BOGARDUS, Professors

**The Principles of Sociology.** The elements of social theory, and the structure, development, and activities of human society. A comprehensive study of the social process and social ends, with frequent application to concrete conditions. Three units; first semester.

**Social Theories.** A comparative study of the writings of leading sociologists of the present day. Extensive library work and frequent student reports are among the requirements. Three units; second semester.

With the permission of the Dean and the Department of Sociology, students may substitute for Social Theories the following:

**Charities and Correction.** Studies in social pathology, poverty and philanthropy, the dependent classes, and the public and private administration of charities. The class visits charitable and reformatory institutions in Los Angeles and the vicinity to study conditions and the methods of social betterment. Three units.

**SPECIAL LECTURERS**

As indicated below special lectures by men eminently qualified are given before the whole department within the college year at dates to be arranged.

MATT S. HUGHES, D.D., LL.D.

"The Objective of Preaching."

"The Psychology of the Congregation."

CHARLES EDWARD LOCKE, A.M., D.D.

"Problems for the City Pastor."

HARCOURT W. PECK, D.D.

"The Pastor as an Evangelist."

FRANKLIN D. MATHER, D.C.L.

"Ecclesiastical Law."

W. E. TILROE, D.D.

ALFRED INWOOD, D.D.

"The Minister's Spiritual Life."

BISHOP EDWIN H. HUGHES, D.D., LL.D.

**SPECIAL ADVANTAGES**

The School of Theology is in the immediate neighborhood of the College of Liberal Arts. It is constantly urged upon our students that the religious leaders must be intellectual leaders, and so a degree in Arts is made a prerequisite to a degree in Theology.

The intellectual atmosphere of the University tends to foster ambition in our men, and many who come intending to take Course I, or at most Course II, are glad to lay the broader foundation of a university education.

Students taking any one of the three courses in Theology will be allowed four hours in each semester in the College of Liberal Arts free of charge.

The Pauline Association, organized by the students of Maclay for mutual literary and religious improvement, is useful and flourishing.

The Young Men's Christian Association of the University is well sustained and offers a fine field for both growth and work.

Able men are in the pulpits of the city churches and so inspiring models of gospel preaching are always available.

The Methodist Mission of Los Angeles calls upon our men for help throughout the year, furnishing opportunity for the best kind of training.

### **CREDENTIALS**

A license to preach will be a sufficient credential. Those not so qualified may present a certificate from their pastor as to their fitness to study for the Christian ministry, or for other religious work.

### **FEES AND EXPENSES**

Tuition in Maclay College is free.

A registration fee of \$12.00 a semester is charged.

A generous concession is made by the College of Oratory in favor of Maclay students. A fee of five dollars per semester is charged for the work required in Sacred Oratory.

Lectures by men and women of eminence in special fields are frequently given in the Assembly Hall and are free to all our students.

Free residence in the Maclay College Building is provided for a limited number. Rooms will be assigned in the order of accepted applications.

Numerous churches in the vicinity of Los Angeles find pastors among our students, and the District Superintendents are glad to make such arrangements where it is mutually satisfactory.

An information and employment bureau is maintained by the University Y. M. C. A., which is very helpful to those who wish to support themselves while in attendance at college.

Any additional information promptly given on application to

E. A. HEALY, Dean, Maclay College,  
University, Los Angeles, Cal.

# *The* COLLEGE *of* PHARMACY

The pharmacist of today requires a high grade of technical knowledge. The College of Pharmacy, an integral department of the University of Southern California, was organized to supply this demand; its aim and purpose being to create a means for higher pharmaceutical education, and to supply a broader foundation for the student's professional career by providing systematic instruction and special training in those subjects requisite for the successful practice of pharmacy.

## LOCATION AND EQUIPMENT

The College of Pharmacy is located at 35th Place and University Avenue on the campus of the University of Southern California.

The advantages of the metropolitan location of this College in the city of Los Angeles are obvious.

### University Advantages

The close association of the student of the College of Pharmacy with those of the other colleges of the University on the campus affords valuable opportunities of social culture and of attending prominent lectures on subjects of vital interest to the student.

## COURSES OF INSTRUCTION

The session will open October 5, 1915, and will continue until May 30, 1916. The schedule is arranged for the forenoon so as to allow students the privilege of retaining their positions as clerks in the stores of Los Angeles and neighboring towns while attending college. The hours of instruction are from 8 a. m. to 12 m.



The subjects included in the curriculum are operative and dispensing Pharmacy; organic, inorganic, and analytical Chemistry; Botany; Materia Medica; Pharmacognosy; Toxicology; Hygiene; Physiology; Sanitary Science; Food and Drug Analysis; and Microscopy; together with special lectures upon business topics especially suited to the retail pharmacist. The methods of instruction embrace lectures, demonstrations, recitations, written and oral examinations, constant laboratory work, and individual instruction.

### REQUIREMENTS FOR ADMISSION

**a. To the Junior Class.**—Applicants must be at least seventeen years of age. Scholastic requirements for admission may be met as follows:

1. Graduation from an accredited high school or other preparatory school of approved rank, requiring for graduation not less than fifteen units\* of work successfully carried.

2. The completion of one year of high-school work or its equivalent after eight years of grammar-school work. This "one year" must consist of not less than four units of high-school work, in which should be included algebra, Latin, and English.

Any deficiencies in the entrance conditions may, during the first year's work in Pharmacy, be removed in the Preparatory School of the University or with a tutor approved by the College of Pharmacy.

**b. To Advanced Standing.**—Students who have pursued courses of study in other colleges of pharmacy will be given credit for such portions of their work as are equivalent to the work required by this College.

**3. To Graduate Standing.**—Persons who have received the degree of Graduate in Pharmacy (Ph. G.) from this College, or who have received an equivalent training elsewhere, are eligible to the graduate courses.

---

\*The term "unit" is here used to denote a preparatory subject studied throughout one school year with five class exercises (or the equivalent) a week. This grade of preparation is equivalent to that indicated for admission to the College of Liberal Arts, in present year-book, pages 40-52.

## EXAMINATIONS

Written examinations are held from time to time during the session in each of the subjects taught by the professors, and the ratings received are recorded. Attendance upon these examinations is compulsory. Any student unavoidably absent is required to give the professor a written statement of the cause of his absence.

Each student is required to attend at least eighty per cent. of the lectures and laboratory sessions in each department, and failing to do so becomes ineligible for examinations except where, prior to the examination, he presents a satisfactory excuse for absence.

## CONDITIONS FOR GRADUATION

The candidate for the degree of Graduate in Pharmacy (Ph. G.) from this College must have fulfilled the following conditions:

1. He must have attained the age of twenty-one years.\*
2. He must be of good moral character and must have maintained an irreproachable moral standing while in attendance at this College.
3. He must have attended two full years in each of the departments of this College, or one year (the Senior) in this, after a course in some other recognized College of Pharmacy.
4. He must have attended at least eighty per cent. of the lectures, reviews, and laboratory work.
5. He must be present at Commencement unless excused by the Dean.

---

\*If he is under age, the degree will be conferred at the satisfactory completion of his course in college; but his diploma will be held by the Dean until this condition has been met.

## GRADUATE COURSE

To attain to the degree of Pharmaceutical Chemist (Ph.C.) the candidate must have complied with the following conditions:

1. He must be a graduate of a high school requiring for graduation the completion of not less than the fifteen units required for admission to the College of Liberal Arts.\*
2. He must have received, at this College or from some other reputable College of Pharmacy, the degree of Graduate in Pharmacy under the conditions specified above.
3. He must have completed at this College a graduate course consisting of not less than twenty-five units of University work and including the preparation of a satisfactory thesis embodying the results of original investigation in a subject in or allied to pharmacy or chemistry.

## COURSES *of* INSTRUCTION PHARMACY

ARTHUR R. MAAS, Professor

1. **Junior Pharmacy.** The lectures of the Junior year treat of the history of the Pharmacopoeia. The subjects of weights and measures, percentage solution, and the arithmetic of dispensing and manufacturing pharmacy are considered at length. Specific gravity and specific volume are demonstrated from various apparatus, which the lecturer thoroughly explains. Heat is next considered, and then the operations wherein heat is used, as evaporation, distillation, sublimation, desiccation, exsiccation, etc. This is followed by a discussion of the preservation of crude drugs and their preparation for manufacturing purposes, and the operations of decantation, filtration, clarification, maceration, infusion, decoction, and cally studied in alternation with those of extemporaneous pharmacy. While they are discussed from the standpoint of percolation. The standard galenical preparations are critically studied in alternation with those of extemporaneous

---

\*See pages 40-52.

pharmacy. While they are discussed from the standpoint of their several classifications, such individual preparations as merit it receive special consideration, the object being to familiarize the student with the reasons for each step taken in the manufacture of the different preparations. Two lectures and six laboratory periods per week; throughout the year, junior year.

**2. Senior Pharmacy.** The lectures of the Senior year embrace the study of the inorganic and organic acids and the salts of the different metallic bases. The commercial methods of preparation are touched upon, and a special effort is made to teach the student how to prepare them extemporaneously when necessity arises. In addition to the official compounds, those unofficial ones which, through frequency of use, merit it, likewise receive attention. A study of alkaloids and the neutral principles of vegetable drugs follows. Extemporaneous pharmacy is then resumed, including a thorough discussion of dispensing. Facsimiles of physicians' prescriptions are, by means of the stereopticon, thrown upon a screen, and the class is drilled in reading those that are with difficulty legible. Chemical and Pharmaceutical incompatibilities are considered, and the best methods for overcoming them are discussed. Two lectures and six laboratory periods per week; throughout the year, Senior year.

**3. Manufacturing Pharmacy.** Visits are made to several large manufacturing establishments where the preparation of pills, tablets, fluid extracts, etc., is studied at length from a manufacturing standpoint.

## **BOTANY AND MICROSCOPY**

**ALBERT B. ULREY, Professor**

**ANDREW C. LIFE, Associate Professor**

### **Botany**

These courses in Botany and Microscopy are planned with especial reference to the needs of the pharmacist. Since most drugs are parts of plants or are plant-products, a thorough knowledge of plant life is necessary to their dispensing.

In these courses the student is furnished with a compound microscope, a hand lens, and dissecting instruments. The lecture room is supplied with a complete electrical projection apparatus by which microscopic objects can be thrown on the screen before the class.

**1. Botany.** The year is devoted to the study of seed-bearing plants (the Spermaphyta), following by a briefer consideration of the Algae and Fungi (Thallophytes), the Mosses and Liverworts (Bryophytes), and the Ferns and their allies (Pteridophytes). (1) The parts of the flower, leaf, root, and stem are studied with reference to the classification of plants and the nomenclature in each of the more important families. (2) The microscopic structure of the parts of the plant is then studied in order to familiarize the student with the kinds of cells found in the stem, root, and leaves, preparatory to the study of pharmacognosy. (3) A study is made of the manner in which drug products are produced by the life-processes and habits of plants. Special attention is given to those plants that are of importance to the pharmacist. One lecture and one laboratory hour per week; throughout the year, Junior year.

**2. Microscopy.** Throughout Course 1 the student has been learning the use of the microscope, its parts, the methods of preparing slides for temporary use, etc. In Course 2 the student examines and uses the different kinds of microscopes and accessories. He learns how to measure microscopic objects (micrometry) and how to prepare permanent slides of tissues and other objects. The laboratories are fitted up with a complete set of apparatus for photographing microscopic objects; ten styles of compound microscopes of foreign and American makes; four styles of microtomes; a camera lucida; condensers; micrometers; and several hundred prepared slides for use in class work and demonstration. Two hours laboratory per week; throughout the year, senior year.



**MATERIA MEDICA AND PHARMACOGNOSY****ANDREW C. LIFE**, Associate Professor**CHARLES W. HILL**, Lecturer

1. **Junior Course.** This course presents the subject in as broad, yet concise, form as possible. It is confined to that instruction that will be of greatest benefit to the student when the course is completed, giving larger consideration to those drugs that are most frequently met with in commerce. The course treats first of the drugs of vegetable (phanerogamic and cryptogamic) origin, and then proceeds to consider the drugs of animal derivation. These agents are considered in an order based upon a commercial classification: first the Roots, then the Phizomes, the Bark, the Flowers, the Fruit, the Seeds, etc. Each drug is considered as to its nature, origin, commercial and botanical relation, microscopical structure, active principles, therapeutic action, doses, etc. Adulterations, admixtures, and substitutes are thoroughly discussed. The work is based upon the Pharmacopoeia; at the same time due attention is given to those remedies that are unofficial. One lecture and two hours laboratory per week; throughout the year, Junior year.

**CHEMISTRY****LAIRD J. STABLER**, Professor

1. **General Inorganic Chemistry.** This is a course of lectures and demonstrations designed to be an introductory course in general chemistry, and including a consideration of the principles governing chemical action and a description of the properties of the various elements and their compounds, as well as drill in the meaning and use of symbols in chemical formulae and equations. Special emphasis is placed on chemical facts involved in the daily work of a pharmacist.

In the laboratory the student is provided with a complete equipment of apparatus for qualitative analysis. A detailed study of the chemical and physical properties of the non-metals and their more important compounds is made, and practical instruction is given in elementary qualitative analysis. Two lectures and six hours laboratory per week; first semester, Junior year.

**2. Qualitative Analysis.** This course, following that in General Inorganic Chemistry, is a study of the methods of separation and identification of the principal bases and acids. In this work the identity and purity tests of the Pharmacopoeia are studied. The student analyzes for bases and acids a number of compounds unknown to him and makes tests for impurities in pharmaceutical and commercial chemicals. Two lectures and six hours laboratory per week; second semester, Junior year.

**3. Organic Chemistry.** The course covers the whole field of this branch, which is of first importance to the pharmacist. Special attention is paid to those compounds that are of pharmaceutical value, including synthetical and medicinal preparations. The following subjects are studied with care: Hydrocarbons, alcohols, ethers, compound ethers, aldehydes, glycerin, fats, soaps, oils, carbohydrates, organic acids, amines and amides, aromatic bodies, resins, albuminoids, cyanogen compounds, alkaloids, etc. Some of the important chemical operations occurring in nature receive attention, such as combustion, decay, fermentation, and putrefaction. The laboratory work consists of the preparation of typical organic preparations illustrating the general reactions involved in organic chemistry. Among the preparations made are ether, chloroform, iodoform, acetic ether, nitrous ether, acetanilide, methyl salicylate, etc. Two lectures and six hours laboratory per week; first semester, senior year.

**4. Pharmaceutical Analysis and Specialties.** This course emphasizes general qualitative analysis, and then advances to those types of advanced special analysis upon which the pharmaceutical chemist may most frequently be called on to render expert opinion. Two lectures and six hours laboratory per week; second semester, senior year.

The work of the course is divided as follows:

(a) **Quantitative Analysis.** An introduction to the underlying principles of gravimetric and volumetric analysis. Attention is paid to the standard "Volumetric Solutions" of the Pharmacopoeia.

(b) **Toxicology:** Lectures in which are studied the different kinds of poisons, the classes of antidotes, the various bodily conditions that modify the effects of poisons, and the different channels by which poisons may enter the body. Later each poison is taken up in detail and studied as to its lethal dose, symptoms, antidote, and treatment. Attention is given to Posology, doses of potent drugs being given special emphasis. The practical laboratory work deals with the identification of the common poisons and also with the methods of separating them from various complex mixtures.

(c) **Urine Analysis.** Lectures on both the normal and the pathological constituents of urine. In the laboratory the qualitative and quantitative estimation of sugar, albumin, urea, etc., is studied, and microscopic examination is made of the sediment.

(d) **Food and Drug Analysis.** Lectures and laboratory work. Each student will be required to make a number of assays of United States Pharmacopoeia preparations, and also to examine food products for preservatives and adulterants. The official methods of analysis of the Department of Agriculture will be employed.

## PHYSIOLOGY, HYGIENE, AND SANITARY SCIENCE

ALBERT B. ULREY, Professor

### Physiology

The action of drugs on the body is a subject demanding attention from the pharmacist. He is responsible both morally and legally for the results of his sale of drugs. A knowledge of the human body, its functions, and its proper care therefore becomes an absolute necessity to the present-day pharmacist.

1. **Physiology.** A study of the human body, its parts, and the way it carries on the functions of digestion, circulation, etc. All the systems of organs are considered, and each of

the fundamental processes is studied. The semester's work prepares the student to understand to some extent what actions drugs may have on the body. One hour lecture and demonstration per week; first semester, junior year.

**2. Hygiene.** The care of the body as to the use of foods, drink, fresh air, exercise, etc.; the methods by which one may enjoy health as a result of right living and the injury likely to result from wrong habits; and the place of drugs in everyday affairs as they are related to hygiene. One hour lecture and demonstration per week; second semester, junior year.

**3. Bacteriology.** The nature of bacteria, the methods of growing them, and their place in nature. A sufficient acquaintance with these forms is attained to enable the pharmacist to know which bacteria are beneficial, which disease-producing; what conditions are harmful and what not; how to prevent decay in foods, and other substances; and the best methods of sterilizing and disinfection. Water, milk, and other foods receive special study with reference to the bacteria they contain. The course gives sufficient practice in handling bacteria to dissipate needless fear of them and to enable one to guard against the danger of infection where disease-producing forms are likely to be present. One hour lecture and demonstration per week; first semester, senior year.

**4. Sanitary Science.** A study of (1) the nature of infectious diseases and their dissemination and control; (2) the problems of water-supply and sewage; (3) the distribution and care of foods in relation to the public health; (4) sanitary surveys of residences, resorts, and public buildings; and (5) the various agencies for the federal, state, and municipal supervision of the public health. Each student makes a study of a residence or a public building and incorporates his findings in a report to be completed prior to the final examinations. One lecture per week; second semester, senior year.

**AUXILIARY LECTURE COURSES**

C. L. LOWMAN, M.D., Lecturer in Medicine  
HOWARD A. PEAIRS, Lecturer in Jurisprudence  
L. SCHIFF, Lecturer in Commercial Pharmacy

1. **First Aid to the Injured.** This course of several lectures is planned to meet the immediate needs of the pharmacist who is often called upon to render first aid in accidents and do general emergency work. The subjects touched on are wounds and their treatment, burns, fractures and dislocations, poisoning, resuscitation from unconscious conditions, bandaging, etc. Senior year.

2. **Commercial Pharmacy.** This course consists of several lectures on topics in connection with the conduct of the business of Pharmacy, such as buying, selling, insurance, advertising, bookkeeping, correspondence, and general business building. Senior year.

3. **Pharmaceutical Jurisprudence.** This course consists of several lectures in which the rights and responsibilities of pharmacists and the laws affecting them are taken up and fully considered. The statutes regulating the practice of Pharmacy, with their constitutionality, are discussed. The legal limits of Pharmacy, the right to practice, the legal qualifications of the pharmacist, etc., are considered, together with the liability of the pharmacist and the manufacturing pharmacist. Senior year.

**GRADUATE COURSE IN PHARMACY**

The Graduate Course in Pharmacy is open to graduates of this college and to graduates of other colleges requiring equivalent qualifications for graduation. The course leads to the degree of Bachelor of Pharmacy (Phar. B.).

The detailed course, of not less than fifty-five units, is to be elected, with the approval of the Faculty, from among the University courses listed below. Upon completing the prescribed course, passing the required examination, and presenting to the examining committee a satisfactory thesis em-



bodying the results of original research or investigation in a subject in or allied to pharmacy or chemistry, the candidate will be granted the degree in question.

The University courses from which the graduate course in Pharmacy may be elected are as follows:\*

**Chemistry 7. Organic Chemistry.** Lectures and recitations on the chemistry of the carbon compounds. Perkin and Kippings' "Organic Chemistry." Two units; both semesters.

**Chemistry 7a. Organic Preparations.** A laboratory course in the preparation of typical carbon-compounds in both the aliphatic and aromatic series, to accompany course 7. Two units; both semesters.

**Chemistry 7b. Organic Preparations—Advanced.** A laboratory course in the preparation of higher organic compounds, with supplementary reading on theory and methods. This course is recommended to graduate students who expect to do technical work in the field covered by organic chemistry, or who desire to pursue research in chemistry for higher degree. Either or both semesters.

**Chemistry 8. Mineral Analysis.** Gravimetric and volumetric analysis of representative minerals, ores, and alloys. Prerequisite, course 4 or its equivalent. Three or five units; either semester.

**Chemistry 9. Physical Chemistry.** A lecture course or its equivalent. A general study of electro-chemistry is included in the work of the second semester. Bigelow's "Theoretical and Physical Chemistry" will be used as a main reference book. Two units; throughout the year.

**Chemistry 9a. Physical Chemical Measurements.** A laboratory course to accompany or follow course 9. Molecular and atomic weight-determinations by vapor-density, boiling-point and freezing-point methods. Problems in chemical equilibrium and reaction velocity. Determination of conductivity of

---

\*In the following list one "unit" equals one lecture or recitation hour or two laboratory hours.

electrolytes, fraction ionized, ionic mobility, single and double potentials, the preparation of standard cells. Three hours of laboratory work a week. One unit; throughout the year.

**Chemistry 10. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, etc. Prerequisite, course 4 or its equivalent. Three or five units; either semester.

**Chemistry 12. Food Analysis.** A laboratory course in the chemistry of meat and meat products, edibles and fats, dairy products, cereal products, saccharine products, canned vegetables, cocoa, tea, coffee, spices, vinegar, flavoring extracts, fruits and fruit products, fermented and distilled liquors, baking powders, food preservatives, and coloring matter. Open to students who have completed courses 4 and 7. Two units; either semester.

**Chemistry 13. Industrial Chemistry.** A lecture course covering the chemistry involved in the manufacture of oils, soap, sugar, explosives, and other commercial products. Lectures will be given by chemists from various manufacturing establishments. Prerequisites, courses 2, 3, and 7. One unit; second semester.

**Chemistry 13a. Oil and Gas Analysis.** A laboratory course in commercial oil and gas analysis. A special oil laboratory is equipped for handling crude petroleum on a basis commensurate with commercial practice. Two units; second semester.

**Chemistry 14. Assaying.** This course comprises silver and gold extraction by scorification and crucible methods; the fire-assay of copper, lead, and tin; the extraction of gold from ores by the amalgamation, the chlorination, the cyanide, and the electrolytic processes. Two units; second semester.

**Chemistry 16. Research.** Research work, under the direction of the department, may be pursued in either pure or applied Chemistry.

**Biology 20. Advanced Bacteriology and Sanitary Science.**

The course consists of an advanced study of Bacteriology in its relation to hygiene, sanitary science, and the work of the pharmacist. It consists in part of testing water, staining bacteria, and testing disinfectants, together with a study of the bacteria of foods. Two units; throughout the year.

**Pharmacy 30. Thesis.** Graduate students are required to present a graduating thesis showing the result of some original work in one of the departments of pharmacy. The subject of the thesis must have the approval of the professor in whose department the thesis is selected. Thesis subjects should be selected not later than the middle of the first semester. The completed work must be handed in two weeks before the close of college.

## **FEES AND EXPENSES**

**Tuition Fees.** The tuition fee for each year is \$100. The payment of this fee entitles the purchaser to one continuous course of lectures and laboratory instruction in all departments. The tuition fee covers all drugs, chemicals, and other materials (with the exception of a few expensive drugs and chemicals) consumed by the student in the laboratories.

**Special Students** may, by permission of the faculty, take any part of the course at a proportionate tuition fee, providing that such fee shall not be less than \$25.00. Medical students will find a systematic instruction in pharmacy an excellent foundation for a medical course. The instruction offered in pharmacy will also give a working knowledge of chemistry to those interested in the engineering and metallurgical industries.

**Laboratory Deposit.** Chemical and pharmaceutical apparatus and supplies, together with microscopes and other implements required in the work of the course, are furnished by the College without expense to the student, but breakage or damage to apparatus must be paid for. For this reason each junior or senior student is required to deposit \$15.00

with the Secretary. This deposit, or such portion of it as is not required for the specified purpose, will be refunded at the close of the term.

**A Diploma Fee** of \$10.00 will be required.

**Payment of Fees.** All fees are to be paid at the beginning of the term. Where this is impossible, the laboratory deposit and at least one-half of the tuition fee must be paid upon entering the class, the balance of the tuition fee to be secured by note to be paid sixty days from the date of matriculation. Non-payment of fees debars the student from the final examinations.

### GENERAL INFORMATION

**Suggestions to Prospective Students.** It would be to the advantage of students if they would matriculate, secure boarding places, and fulfill the entrance requirements, a few days in advance of the opening exercises, so that their studies may not be interrupted in the beginning of the college year.

**Board and Lodging.** Good board and lodging vary in prices from five to seven dollars per week. Furnished rooms, accommodating two students, cost from eight to twelve dollars per month. By forming boarding clubs, students may reduce the cost of board very considerably.

A list of desirable rooms and boarding places may be obtained by addressing the Young Men's and Young Women's Christian Association of Los Angeles or by inquiring at the offices of these organizations of the University in the College of Liberal Arts.

**Employment.** The course of lectures has been so arranged as to permit those who desire it to devote a portion of their time to employment. The Secretary will keep a register of students seeking such employment, and will give every assistance possible in procuring it for them.

**Discipline and Good Order.** All students are expected to observe the principles of good conduct and order while attending the College, and plain infractions of the rules will be

referred to the Executive Committee of the Faculty, with recommendation of reprimand, suspension, or expulsion.

**Athletics.** The Faculty encourage athletic sports for their value in developing the body, in furnishing a means of pleasant recreation and a source of social and ethical culture, and in cultivating the spirit of co-operative enterprise. One of the finest athletic fields in Southern California is on the campus, as well as a gymnasium completely equipped; while the mammoth athletic field at Exposition Park is but a short distance away and is open to the use of University students. Students in good standing in the College of Pharmacy are eligible to places on the football, baseball, and track teams of the University.

**Correspondence.** Address all inquiries and other communications to

THE COLLEGE OF PHARMACY,  
Thirty-fifth Street and University Avenue,  
Los Angeles, Cal.



# *The* COLLEGE *of* ORATORY

The system used in the College of Oratory is based upon the Cumnock Method, founded by Robert McLean Cumnock, L.H.D., Director of the School of Oratory, Northwestern University, Evanston, Illinois.

The aims of the College are: 1. To develop the inner self. 2. To prepare the body to express the inner self. The method is neither imitative nor mechanical, but is founded upon psychological principles. The pupil acquires the power to interpret for himself and to express emotions through his own individuality. The result is naturalness and simplicity of manner, together with personal power.

A great deal of attention is paid to the Department of Public Speaking. Ministers, theological students, or any who may have occasion to address audiences, will find this work of great value.

The Calendar of the College of Oratory is the same as that of the College of Liberal Arts.

## **Credit in the College of Liberal Arts**

A student in the College of Liberal Arts may elect a maximum of fifteen hours in the College of Oratory. (See Liberal Arts.)

## **COURSES *of* STUDY**

### **(Class Work)**

**1. Fundamental Principles of Expression:** English phonation, enunciation, interpretation of selections from Cumnock's "Choice Readings." Two hours; first semester.

**2. Voice Building:** Breathing, tone placing, bodily expression, interpretation of selections from Cumnock's "Choice Readings." Two hours; second semester.

**3. Interpretations from Modern Writers:** Kipling, Barrie, Van Dyke, Riley, Noyes, Wiggin, Tagore, Dunbar, and others. Two hours; throughout the year.

**4. Voice:** Relaxation, concentration, breathing, tone-placing, rhythm, phrasing. Two hours; throughout the year.

**5. Public Speaking:** The preparation and delivery of short speeches, such as talks on current public questions. Two hours; throughout the year.

**6. Debate:** The preparation of briefs for debate; argumentation. Prerequisite, course 5. Two hours; throughout the year.

**7. Speech and Action:** A course given to stimulate the imagination, and to establish responsive action of the body as the natural result of the thought. One hour; throughout the year.

**8. Oratory:** A study of masterpieces of oratory. Two hours; second semester.

**9. Shakespeare:** "Hamlet," "King Richard III.," "The Taming of the Shrew." Two hours; second semester.

**10. Repertoire:** The abridgment of books and classics for public presentation, the arrangement of programs, impersonation. For advanced students only. One hour; throughout the year.

**11. Bible and Hymn Reading:** Vocal Expression of the Bible and hymns, voice building. Text, Curry's "Vocal Interpretation of the Bible." Two hours; second semester.

**12. Assembly:** All pupils meet with the Dean to pursue a course in the art of interpretation. The first semester is devoted to the interpretation of masterpieces of literature. The second semester covers a study of the Modern Drama. Two hours; throughout the year.

**13. Dramatic Club:** One Shakespearean play is staged during the year. Numerous other plays and sketches are presented. (Open to all regular students of the University.)

**14. Technique of Aesthetic Gymnastics:** A course is given to establish poise, strength, control, lightness, plasticity and relaxation of the body. Chalif's Technique of Classical Exercises is made the fundamental in the work.

**15. Story Telling:** A study is made of the art of telling stories to children. One hour; throughout the year.

### ENTRANCE REQUIREMENTS

Fifteen high school or academy units must be presented for entrance to the College of Oratory.\* This does not apply to students enrolling for the Special Course or for individual instruction.

### DIPLOMA

A diploma is granted to regular students upon the completion of the following prescribed work: Three years of individual instruction, one forty-five minute lesson per week; the fifteen courses; one year of gymnasium work; and in addition forty-five units in the College of Liberal Arts. These units include all the General College Requirements† except that General Biology 1 and 2 (Personal Hygiene and Sanitary Science) may be used as the required science.

### SPECIAL COURSE

The College of Oratory will grant a Certificate of Expression upon the completion of two years of private work, one forty-five minute lesson per week; courses 1, 2, 3, 4, 5, 7, 9, 10, 12, 13, 14, 15; one year of gymnasium work; two years of English; and one year of History.

### RECITALS

Pupils' recitals are given every week, on Tuesday at 3:05 p. m., in the Athena Literary Hall. The participation in

---

\*This requirement is identical with the requirement for admission to the College of Liberal Arts, as described on pages 40-52.

†See pages 53-55.

these recitals by students is required that the student may have practice and gain confidence in appearing before audiences. All students enrolled in the school are expected to be present at each recital.

### LECTURE COURSE

A course of lectures has been arranged for the College of Oratory, to be given by prominent men and women on various subjects of interest in the world of art and eloquence. A cordial invitation is extended to the public.

### PHYSICAL EXPRESSION

"Is not that the best education which gives to the mind and to the body all the force, all the beauty, and all the perfection of which they are capable?"—Plato.

Special classes in Physical Culture are conducted for the Oratory students. The laws that underlie Physical Expression are here studied, and such exercises are given as will best develop the pupil toward health, grace, and expressiveness of movement. It is the aim of this work to bring the body under perfect control of the will, and to teach the principles of gesture in such a manner as to give spontaneity and freedom from affectation.

### SATURDAY INSTRUCTION

Special classes are offered and students may arrange for individual instruction.

### SUMMER SCHOOL

During the summer term of six weeks a course, both in class and in individual instruction, is offered. Send for Summer Bulletin, College of Oratory.

**TUITION**

Fees are payable in advance.

Delinquent payments involve an increase of ten per cent. in tuition.

**Full Course**, including one private lesson per week, four or more classes in Expression, one study in the High School or in the College of Liberal Arts, and one year of Gymnasium.

Registration fee, per semester (not refundable).....	\$ 3.00
Full course, per semester (18 weeks).....	75.00
Two private lessons per week (30 minutes).....	55.00
One private lesson per week (30 minutes).....	30.00
A course of ten lessons (30 weeks).....	18.00
One private lesson per week (45 minutes).....	45.00
A course of ten lessons (45 minutes).....	26.50
Single lessons .....	\$1.50 to 3.50
Class, two periods per week (55 minutes).....	10.00
Coaching Plays (60 minutes).....	1.50
Coaching Debate (60 minutes).....	5.00

Special rates given to students entering University contests.

Diploma fee .....	\$10.00
Certificate fee .....	5.00

A discount of ten per cent. on all private work will be given to ministers and deaconesses.

Send for a catalogue of the Collège of Oratory. Address,

BEULAH WRIGHT, Dean,

College of Oratory,

University of Southern California,

Thirty-fifth Street and University Avenue.



# *The* COLLEGE *of* MUSIC

The College of Music of the University will begin its thirty-first year on September 6, 1915. By a faithful maintenance of high standards its faculty have brought it to a well recognized position in higher musical education. Its diplomas have all the prestige which comes from its long establishment and from the name of the University. Its graduates and former students are taking prominent places in the musical world all over the Southwest, both as teachers and as performers.

Extended courses are offered in a wide range of musical subjects. The end sought in every branch pursued by the student is such thoroughness as will give him a genuine accomplishment and true culture, or insure him the mastery expected of a professional.

## ADVANTAGES OF COLLEGE STUDY

The general spirit of earnest study characteristic of an institution of higher learning such as the University has been found to react very beneficially on the student of music, who, too often, is inclined to superficiality. Breadth of character and liberality of ideas are more surely attained in the atmosphere of general education than in that of specialized study.

Among the advantages of pursuing the study of music in an institution of collegiate rank and methods there may be mentioned the requirement of regular attendance at lessons; the creation of a musical atmosphere by the recitals, lectures, and class work; the incentive to greater effort by observing the proficiency of others; the sharpening of the critical faculties and the development of taste by listening to the performance of other students; and the opportunity given for obtaining in class work, at very slight expense, the very best of training in the theoretical studies, such as harmony, theory,

and the history of music—studies that are essential to the well-grounded musician and that the private teacher can not touch upon in the lesson hour.

### RECITALS

A feature of the greatest value to the students is the regular pupils' recitals, at which the pupils are expected to play or sing before the whole school, as their teachers may direct. Public performance is an art in itself, and can only be mastered by many public appearances. Pupils who acquit themselves creditably at the recitals before the music students only, are allowed to appear at the public recitals of the school. A practical familiarity is thus gained with the music of the other branches represented outside of the student's specialty. In addition, recitals are given from time to time by the faculty, who are also frequently heard in the recitals given by the advanced pupils. Music students have free admission to all public exercises of the school.

### NORMAL CLASS FOR PIANO TEACHERS

In the Normal Class students have the opportunity of observing the actual teaching of pupils by the instructor and of giving lessons under the instructor's guidance.

These lessons include the story of the Pianoforte; keyboard drill; tone properties; the grand staff; pulsation; notes and rests; rhythm, accent, and measure; key grouping, the major and minor scales, and chord building; intervals; table and piano technical work; teaching materials; and original work, including child-nature studies, phrasing, melody-writing, and lesson planning. This course is required of all graduates in the piano department.

### THE COURSE OF STUDY

The educational system of the school is divided into two general departments: the Preparatory and the Normal or Collegiate.

No requirements are made for admission, but applicants should be prepared to perform one or two musical selections of different styles representative of their previous work.

All beginners are received in the Preparatory department, whether they plan for the regular advanced courses or merely desire the best of training during the time they devote to the study. Correct elementary teaching is the most important and, in some respects, the most difficult of all musical instruction. It is the aim of the school to advance pupils as rapidly as is consistent with thoroughness and the formation of correct habits.

The Normal or Collegiate department is designed for students preparing for the profession as teachers and artists, and for amateurs desirous of obtaining a thorough training in the art and science of music.

### DIPLOMAS

The diploma of the University is given at the completion of the Normal or Collegiate course. The requirements for graduation in any department are:

- (1) The completion of the prescribed course in that department, at least one year's work in which must have been done in this school.
- (2) The completion of the following theoretical course: Ear Training, one semester; Harmony, three semesters; Counterpoint, one semester; Theory, two semesters; History, two semesters.
- (3) The public performance during the Senior year of an entire program under the direction of the department teacher.
- (4) For piano students, the normal training class; for organ students, a semester of "keyboard harmony"; and for vocal students, one year of piano work.

### TEACHERS' CERTIFICATES

Teachers' Certificates will be given to those who have completed the work of the Normal course and of the Normal Training class, but who for any reason are unable to give the public recital required for graduation. They will, however, be required to give before the faculty a program of a somewhat less exacting nature than that required for the diploma.

## CREDITS IN THE COLLEGE OF LIBERAL ARTS

To students who have met the full college-entrance requirements, credits will be given in the College of Liberal Arts for musical work as follows: Two semester units will be credited to students making a passing grade in any one of the theoretical studies or in advanced vocal or instrumental work, the total number of credits in the College of Music thus granted not, in any case, to exceed fifteen of the entire 120 units required for the degree of Bachelor of Arts.

## BUSINESS REGULATIONS

The work of the academic year is divided into four ten-week terms, beginning respectively on September 6 and November 15, 1915, and January 31 and April 13, 1916; the last term to end on June 20th. Students entering after the opening of the term will register for the remaining portion and will be charged pro rata, except that no reduction will be made for absence from the first two lessons. Students who enter late will find themselves behind their classes.

All students are required to attend the regular recitals of the school and to take part in them whenever so assigned.

No deduction will be made for occasional absence from lessons or for lessons discontinued without notice. Lessons missed will be made up to pupils, if notice of the intended absence is given two days in advance.

Lessons falling on national holidays are not lost to students.

Sheet music will be furnished students at teachers' rates, if paid for on delivery.

Settle all accounts at the office only, making checks payable to **The Dean**.

**Terms:** Tuition is payable strictly in advance at the beginning of each term.

In case an extension of time is absolutely necessary, arrangements must be made with the Secretary, the terms to be stated on the bill and strictly adhered to.

For courses of study and further particulars, send for special booklet.

**TOTAL EXPENSES BY THE TEN-WEEK TERM**

(Four terms per year)

**Piano or Organ—Mr. Skeele.**

45 minutes, once a week, \$25.00; twice a week, \$50.00.

30 minutes, once a week, \$20.00; twice a week, \$40.00.

**Piano—Miss Trowbridge.**

45 minutes, once a week, \$20.00; twice a week, \$40.00.

30 minutes, once a week, \$17.50; twice a week, \$35.00.

**Piano—Miss Davidson.**

45 minutes, once a week, \$15.00; twice a week, \$30.00.

30 minutes, once a week, \$12.50; twice a week, \$25.00.

**Piano—Miss Patton.**

45 minutes, once a week, \$20.00; twice a week, \$40.00.

30 minutes, once a week, \$15.00; twice a week, \$30.00.

**Theory, Harmony, or History—Mr. Pemberton.**

45 minutes, once a week, \$15.00; twice a week, \$30.00.

45 minutes, class, twice a week, \$8.00.

**Violin—Mr. Pemberton.**

1 hour, once a week, \$25.00; twice a week, \$50.00.

**Violin—Mr. Perry.**

30 minutes, once a week, \$20.00; twice a week, \$40.00.

1 hour, once a week, \$30.00; twice a week, \$60.00.

**Vocal—Mrs. Robbins or Mr. Cogswell.**

30 minutes, once a week, \$35.00; twice a week, \$60.00.

**Vocal—Mrs. Sanger.**

30 minutes, once a week, \$15.00; twice a week, \$30.00.

**Vocal—Miss Backstrand.**

30 minutes, once a week, \$12.50; twice a week, \$25.00.

**Normal Training Class, one lesson per week, \$8.00.****Rental of Pipe Organ, one hour each day, \$12.00.****Diploma Fee, \$10.00. Certificate Fee, \$10.00.**

For further information address

THE COLLEGE OF MUSIC,  
University of Southern California,  
306 Blanchard Building, Los Angeles.



# *The* COLLEGE *of* FINE ARTS

The growth of California in wealth and population has for several years past taxed the capacity of local institutions to supply the demand for expert workers in every line of artistic endeavor. The educational standard has been gradually raised throughout California as trained teachers have become available, until only graduates of accredited art schools can hope to obtain the best positions. There is a constant and increasing demand for specialists in design. Illustrating is always a wide open field, offering rich rewards to the well-trained artist. Mural painting and interior decorating are attractive and remunerative fields of endeavor. In architecture there is always need of more expert mechanical draftsmen and especially of competent perspective draftsmen. In pottery, carving, and metal working, the demand always exceeds the supply.

## LOCATION AND EQUIPMENT

The special advantages of this school are many. The College of Fine Arts of the University of Southern California is situated on a cliff overlooking an unspoiled natural park, the famed Arroyo Seco, with a perennial stream and groves of magnificent trees, rocky cliffs and acres of boulders, wide stretches of oak-dotted sward, and the eternal snow-capped mountains closing every vista. Near at hand are mountain canyons, sandy beaches, rocky promontories, and an unparalleled variety of race and costume for models. Probably no spot in the world of the same area offers more variety or greater abundance of paintable material, and the ideal climate permits of outdoor work almost continuously.

The buildings are handsome and commodious. There are nine large, well-lighted, and well-ventilated studios; a picture gallery; an assembly room with piano; a reception room;

cloak rooms; and dormitories with every possible convenience. Every room is perfectly furnished for its purpose. There is an abundant equipment of sculpture, casts, designs in architecture, pottery, metal, jewelry, etc. The library contains all the standard art magazines and many volumes upon art studies. There are also ample grounds for recreation and outdoor study.

The curriculum embraces every department of graphic and plastic art that can be learned from teachers or books. This fullness of curriculum and the constant supervision of each department of work by expert teachers, giving instruction that is largely individual, insure that the student will have a thorough grounding in the fundamental principles of art, and that the graduate will know all that an intelligent and cultured artist or teacher should know. Further, the concentrating of the third year's work on the chosen specialty makes certain that the student will leave the college well equipped to enter the ranks of workers.

## MATRICULATION

**Entrance requirements for the Teacher's Course and the course leading to the degree of Bachelor of Fine Arts:** Fifteen units of high-school work, uniform with requirements for admission to the College of Liberal Arts.\*

**Advanced Standing:** Credits for work done in other art schools will be allowed when satisfactory proficiency is shown, but for the courses above specified the entrance requirements must be fully complied with.

**Special Students** may register for special branches to be taken separately. In such cases certificates of proficiency are granted on the student's passing the required examinations. Students in special branches may enter the school at any time.

---

\*See pages 40-52.

**COLLEGE COURSE (Four Years)**

(Leading to the degree of Bachelor of Fine Arts)

**First Year.**—Charcoal drawing from the cast; clay modeling; pencil drawing from landscape; mechanical drawing, including geometry, perspective, and projection; art history and mythology.

**Second Year.**—Composition and drawing from life of draped and nude figure, portraiture, landscape; anatomy, modeling; water color; art history, sacred history; applied design, pottery, wood carving, metal work; German or French.

**Third Year.**—Painting in water color and oil from life and landscape; pen and wash drawing; composition; modeling; composition and design; normal teaching course; German or French.

**Fourth Year.**—Specializing in the chosen line in painting, sculpture, or architecture.

**TEACHERS' COURSE (Three Years)**

(Leading to a Diploma)

Identical with the first three years of the Degree Course, except that the requirement of French or German is omitted.

**ARCHITECTURAL COURSE (Three Years)**

(Leading to a Diploma)

**First Year.**—As in degree course.

**Second Year.**—Building construction, the nature of materials, stresses and strains; mathematics; plane drawing, perspective; water color; historic styles and the history of ornament.

**Third Year.**—Architectural design.

**ILLUSTRATING COURSE (Three Years)**

**(Leading to a Diploma)**

**First and Second Years.**—As in degree course.

**Third Year.**—Painting in water and oil, pen and wash drawing, caricature, cartooning, and composition.

**DESIGN COURSE (Three Years)**

**(Leading to a Diploma)**

**First Year.**—Free hand and mechanical drawing, original design, art history.

**Second Year.**—Composition, color harmony, original design, anatomy.

**Third Year.**—Historic ornament, fabrics, interior decorating, applied design.

**SCULPTURE (Three Years)**

**(Leading to a Diploma)**

**First Year.**—As in degree course.

**Second Year.**—Modeling from life, draped and nude; portraiture; anatomy; mythology; the history of art.

**Third Year.**—Composition and grouping; modeling from life; casting in plaster and metal; anatomy; historic monuments.

**SPECIAL BRANCHES**

**The Painting Course:** This course includes drawing; color harmony and composition; technic in water and oil; anatomy; the chemistry of pigments.

**Artistic Anatomy:** This course includes study of the skeleton and the superficial muscles, and of movements from life.

**Normal Art Course:** This course includes practical work in all the art branches taught in grade schools, as object drawing in pencil, charcoal, and wash, silhouettes, stenciling, cardboard modeling, colored chalks, harmony, design, etc.

**Metal Work—Brass and Iron:** This course includes hammer work, etching, chasing, piercing, mould making, casting, forging and enameling.

**Jewelry:** This course includes wire and band work, casting, chasing, jewel setting, enameling and design.

**Wood Carving:** This course includes design, the selection of woods, and the technic of carving, incising, bas-relief, and the round.

**Pottery:** This course includes clay modeling, the potter's wheel, moulding, glazing, firing, underglaze painting, harmony, and design.

**Mural Painting:** This course includes drawing, water color painting, color harmony, composition, and practical application.

**Interior Decorating:** This course includes drawing, design, color harmony, composition and the nature and uses of materials.

**Art Glass:** This includes design, hard-metal mounting, leading, cutting, color harmony, painting on glass, and firing.

## SUMMER SCHOOL

A summer school is maintained, beginning about June 20 of each year.

All branches of fine and applied art are taught, the fees being about the same per month as in the full course.

Special circulars will be mailed on application.

## PRIZES

A scholarship for one year is awarded to the member of the graduating class making the best record.

Frequent competitions are open to advanced students, entitling the winners to certain school privileges.



## FEES AND EXPENSES

## Fees

(All-day lessons; hours, 9 a. m. to 12 m.; 1 p. m. to 4 p. m.)

Full Collegiate Year.....	\$95.00
Collegiate Semester .....	50.00
Per month, six days per week.....	13.00
Per month, three days per week.....	7.00
Per month, one day per week.....	4.00
Single lessons, each.....	2.00
Laboratory fee for the Crafts, per term.....	1.00
Graduation fee .....	5.00

All fees are payable in advance.

## REMARKS

There are three lectures per week on anatomy and other art subjects free to all enrolled students, with occasional lectures by noted teachers and artists.

No charge is made for models, lockers, boards, easels, etc.

Materials are furnished to students at the lowest rates.

The school dormitories are equipped with every comfort and convenience, including facilities for light housekeeping.

Board and lodging may be had near the school at reasonable rates.

For further information address

THE COLLEGE OF FINE ARTS

200 Avenue 66, Los Angeles.

# UNIVERSITY HIGH SCHOOL

A preparatory school for a limited number of students is maintained in connection with the Department of Education in the College of Liberal Arts. Four four-year courses are offered, each giving a thorough preparation for entrance to college, and leading to a diploma of graduation.

The instruction in the various courses is given by a distinct faculty of competent instructors, who teach under the supervision of the major professors of the College of Liberal Arts, and others of long teaching experience. Each instructor holds the degree of Bachelor of Arts and has spent at least one semester in graduate work as a special preparation for the profession of teaching.

An exceptional feature of the instruction given in the High School is the opportunity for individual students to receive personal attention from their instructors. This is made possible by the inauguration of a plan to limit the number of students to 150, and to give classes of moderate size to each instructor, who devotes himself to the presentation of the one academic subject in which he is specializing.

Students in the High School enjoy all the general advantages open to the students in the College of Liberal Arts, including the library, lectures, laboratories, and religious and social privileges.

## Requirements for Admission

Applicants must have finished work equivalent to that required for admission to any regular state high school. They must show evidence of fitness to begin the work of the classes in the school. Persons who wish to take a partial course, or to choose their own studies, may enter the High School without a formal examination, and pursue such subjects as they may be prepared to take.

### **Application for Admission**

The registrar upon request will furnish prospective students with application blanks. These, when properly filled out and returned to the registrar's office, will be filed in the order in which they are received, the postmark being taken as the date of application. Since the enrollment of students in the High School will be limited to 150, applications for admission received after this number has been reached will be placed on the waiting-list.

The applicant should register for the first semester 1915-1916 on or before Saturday, September 11, 1915, or should notify the registrar before that date of his intention to enter the High School, stating the probable date of registration. If neither of these conditions is fulfilled, the application will be placed at the end of the waiting-list.

Each applicant whose name has been entered on the waiting-list will be notified immediately of the number of his place; and, should any vacancy occur before instruction begins, notice to that effect will be sent to each one on the waiting-list in the order of application.

### **Registration**

The method and regulations in registration are the same as those in the College of Liberal Arts.\*

### **Attendance**

Attendance upon all class, laboratory, and assembly exercises indicated on the enrollment card is required.

### **Assembly**

The Assembly period is 9:55 to 10:30 on Monday, Wednesday, and Friday of each week. Attendance is required.

### **Reports**

During each semester three regular reports of standing are sent to the parent or guardian of each student. The Faculty desire the co-operation of parents in their efforts to maintain a high grade of scholarship and deportment.

---

\*See pages 52-53.

### **Graduation and Diplomas**

The University High School has a special evening set aside in commencement week for its graduation exercises.

Each student who completes one of the regular courses of study will be granted a diploma.

### **Literary Societies**

The Athenium Society is composed of young men who meet each week for training in public speaking.

The Willard Literary Society is composed of young women who meet each week for training in literary work.

### **Prizes**

A prize of ten dollars is offered to the student who wins in the contest in declamation.

The University offers to its representative in the Interscholastic Oratorical Contest a semester scholarship in the third or fourth year, High School; and an additional semester scholarship in the third or fourth year, if said representative wins first place in the Interscholastic Contest. The scholarship is not transferable.

### **Rooms and Board**

Students are required to submit to the Faculty a statement of the places where they desire to room and board, and must secure the consent of the Faculty in each case.

Board and furnished rooms can be secured in private families at from five dollars to seven dollars a week. Furnished rooms accommodating two students cost from eight to twelve dollars a month.

Other expenses incident to school life vary with the habits and circumstances of the student. They are not, of necessity, so great as to be burdensome to persons in moderate circumstances. The instances have been extremely rare in which students of good ability and health have been compelled to leave the school for want of money.

### General Information

For general information concerning the location of the school, the religious privileges, the library and reading room, the museum and the science laboratories, athletics and the gymnasium, see under College of Liberal Arts.

### Fees and Expenses

Registration Fee, a semester, payable in advance.....	\$25.00
(The registration fee is not refundable.)	
Diploma Fee, payable 30 days before graduation.....	5.00
Laboratory Fees, a semester:	
Biology (each course requiring laboratory work).....	4.00
Chemistry .....	5.00
Physics .....	4.00

Students in Chemistry will deposit a breakage fee of \$5.00 which, after deducting the cost of goods broken, will be refunded at the close of the year.

Room and board (except luncheon Monday to Friday) in the Women's Hall, one hundred and seven dollars (\$107.00) a semester, payable in advance. A cash deposit of five dollars (\$5.00) is required for the reservation of a room. Pupils are expected to furnish their own bed-linen.

Ministers in the regular work of any evangelical denomination may secure for their children a twenty per cent reduction of the registration fee only.



# COURSES OF STUDY

## MODERN LANGUAGE

### LATIN-ENGLISH

#### First Year

English  
Oral English  
Algebra  
Ancient History  
Spanish

#### Second Year

Med. & Mod. History  
Botany or Zoology  
English  
Spanish

#### Third Year

English  
Geometry  
German  
Chemistry or  
English History or  
Industrial History

#### Fourth Year

U. S. History and  
Civics  
English  
German  
Physics or  
Industrial History

#### First Year

English  
Oral English  
Algebra  
Ancient History  
Latin

#### Second Year

Med. & Mod. History  
Botany or Zoology  
English  
Latin

#### Third Year

English  
Geometry  
Latin  
Chemistry or  
English History or  
Industrial History

#### Fourth Year

U. S. History and  
Civics  
English  
Latin  
Physics or  
Industrial History

## CLASSICAL

#### First Year

English  
Oral English  
Algebra  
Ancient History  
Latin

#### Second Year

Med. & Mod. History  
Botany or Zoology  
English  
Latin

#### Third Year

English  
Geometry  
Latin  
Greek

#### Fourth Year

U. S. History and  
Civics  
Latin  
Greek  
Physics

## SCIENTIFIC AND ENGINEERING

#### First Year

English  
Oral English  
Algebra  
Ancient History  
German

#### Second Year

Advanced Algebra  
Botany or Zoology  
English  
German

#### Third Year

English  
Geometry  
F. H. Drawing  
Chemistry

#### Fourth Year

U. S. History and  
Civics  
Mechanical Drawing  
Physics  
Solid Geometry and  
Trigonometry

COURSES *of* INSTRUCTION

## ENGLISH

General Statement: During the first and second year three-fifths of the time will be devoted to the study of English Grammar, Composition, and Spelling, and two-fifths to the study of literary masterpieces. During the third and fourth year two hours a week will be allotted to the study of English Composition with special emphasis upon its oral side, and three hours to the careful reading and study of masterpieces in prose and poetry.

**First Year—First Semester.** Baker's "Correct English and How to Use It," composition and spelling; "Selections from the Old Testament," Tennyson's "Enoch Arden"; Hale's "Man Without a Country" (home reading). **Second Semester.** Grammar, composition, word study, and spelling; Cooper's "The Last of the Mohicans," Scott's "The Lay of the Last Minstrel"; Defoe's "Robinson Crusoe" (home reading).

**First Year Oral English—First Semester:** Principles of voice building: breathing, relaxation, and tone placement. Phonetics. Enunciation. Beginning of common reading. **Second Semester.** Continuation of technique as in first semester. Interpretation of selections in Cumnock Reader. Two hours a week throughout year. Required of first year students.

**Second Year—First Semester.** Clippinger's "English Composition and Rhetoric," word study and spelling; "The Classic Myths," Homer's "Odyssey"; Arnold's "Sohrab and Rustum" (home reading). **Second Semester.** English composition, word study, and spelling; Scott's "Ivanhoe," Gray's "Elegy," Shakespeare's "The Merchant of Venice"; "A Midsummer Night's Dream" (home reading).

# SCHEDULE OF CLASSES FOR 1914-1915

Hour	First Year	Second Year	Third Year	Fourth Year
8:00		Adv. Algebra		Solid Geom. Trigonometry
8:55	1st English	Med. History Mod. History	3rd English	U. S. History Civics
9:50	Chapel M. W. F. Oral Eng. T. Th.	Chapel M. W. F. Oral Eng. T. Th.	Chapel M. W. F.	Chapel M. W. F.
10:35		Botany Zoology	Geometry	Ind. History Economics 4th Latin Drawing
11:30	1st Algebra	Botany T. Th. Zoology T. Th.	Eng. History	4th English Drawing
12:20				
1:15	1st Spanish 1st Latin 1st German	2nd English	3rd Latin Chemistry	Physics
2:10	Ancient History	2nd Spanish 2nd Latin 2nd German	Chemistry F.	Physics W.
3:05			Chemistry F.	Physics W.

Gymnasium Hours arranged to suit convenience of student.

**Second Year Oral English—First Semester.** Text: Cum-nock's "Choice Readings." Continuation of technique and interpretative reading offered in First Year Oral English. Beginning of extemporaneous speaking: narrative, descriptive and biographical. **Second Semester.** Talks on current public questions. Beginning of argumentation in extemporaneous speaking and debating. Two hours a week throughout year. Required of second year students.

**Third Year—First Semester.** Clippinger's "English Composition and Rhetoric," Tennyson's "Idylls of the King," Lowell's "The Vision of Sir Launfal," Coleridge's "The Rime of the Ancient Mariner," George Eliot's "Silas Marner"; Washington's "Farewell Address" (home reading). **Second Semester.** English composition, exposition; Carlyle's "Essay on Burns"; Milton's "Minor Poems"; Shakespeare's "Macbeth," Webster's "First Bunker Hill Oration" (home reading).

**Fourth Year—First Semester.** English composition, exposition; Long's "History of English Literature," "English Poetry: Chaucer to Browning"; Tennyson's "The Princess" (home reading). **Second Semester.** English composition, argumentation; Lowell's "Democracy," Lincoln's Inaugurals and Addresses, Shakespeare's "Hamlet"; Webster's "Reply to Hayne," Bryce's "The Strength of American Democracy."

### ENGLISH BIBLE

**Old Testament.** A course dealing with the sources, form, and materials of the Old Testament, with especial emphasis on the historical phases. The unique mission of the prophets is also carefully considered. It is the object of this course to open up the Bible in a new way and make it a living reality. Two hours; both semesters. ( $\frac{1}{2}$  unit.)

**New Testament.** The object of this course is to present the lives of the two greatest personages in human history, Jesus and Paul, in such a way that not only may the historical data be grasped, but a new inspiration be received from contact with such men. The early Apostolic Church and its place in the Divine plan are also carefully examined. Two hours; both semesters. ( $\frac{1}{2}$  unit.)

## GERMAN

**First Year.** Vos' "Essentials of German." This text book comprises studies in pronunciation, grammar, drill on the forms, elementary conversation, and various anecdotes and poems for translation and memorizing. Further interesting reading and material for conversation and composition are taken from Allen's "Herein." "Das Peterle von Nuernberg" by Bluethgen is read.

**Second Year.** The grammar is finished and reviewed. Various modern German stories and poems are read and reproduced, both orally and in the form of written exercises. The class work is conducted mainly in German, and the ability to read accurately and fluently and to express simple thoughts in spoken and written German is required. Wildenbruch's "Das edle Blut," Storm's "Immensee," Seidel's "Lebrecht Huenchen," and Benedix's "Der Prozess" are the texts used.

## GREEK

**First Year.** Benner and Smyth's text is used throughout the year. The aim of the first year's work is thoroughly to acquaint the pupil with forms.

**Second Year.** During this year the first four books of Xenophon's "Anabasis" are translated. Daily practice is given in sight reading. Pearson's "Greek Prose Composition" is used throughout the year. The work is made the basis of a thorough drill in grammar. Goodwin's Greek Grammar is used for reference.

**Third Year.** Books I-IV of Homer's "Iliad" are read and translated. Practice in sight reading is given daily from Books V and VI. Scansion, forms, syntax, and mythology are given special attention. Pearson's "Greek Prose Composition" is used throughout the year.

**Note.**—Beginning classes in Greek are carried on in the College Department in which the work outlined above is covered in two years. Preparatory students who show special ability and strength in this subject are admitted to these College classes and are advised to avail themselves of this privilege. The same credit (three units) is given to Preparatory students in these classes as is granted in the preparatory Department for the three years' work.



**HISTORY AND ECONOMICS**

In addition to a thorough study of the text-books, the work in History and Economics is supplemented by collateral reading and written reports on assigned topics. Practical use is made of the library reference books, atlases, and dictionaries. Map drawing and carefully kept note-books are required in all the subjects in this department. Five courses are offered, as follows:

**COURSE I. Ancient History.** Since Ancient History furnishes the student with the fundamental ideas for the proper understanding of additional historical study, it ought to be taken in the first or second year of his high school course.

**First Semester.** The Oriental Peoples and the Greeks.

**Second Semester.** The Romans and the Roman Empire through the reign of Constantine. Text: West's "The Ancient World."

**COURSE II. Mediaeval and Modern History.** This course is open to all students who have completed Course I.

**First Semester.** From the "Dark Ages" to the "Discovery of America."

**Second Semester:** From the "Reformation" to the "Napoleonic Era." Text: Myers's "Mediaeval and Modern History."

**COURSE III. English History.** For students registered in the third or fourth year.

**First Semester.** Chapter I to Chapter XIII "The Reign of Elizabeth."

**Second Semester.** Chapter XIV to Chapter XX "The Growth of Democracy." Text: Cheyney's "English History."

**COURSE IV. United States History and Civics.** Primarily for students in the fourth year of the high school. Required of all students who are candidates for the high school diploma.

**First Semester.** Six parts of the text completed: From the "Establishment of the English" to "The Crisis of Disunion."

**Second Semester.** The text-book on civil government completed. Texts: Muzzey's "American History," Forman's "The American Republic."

**COURSE V. Industrial History and Economics:** This is planned for students registered in the third and fourth years.

**First Semester.** Industrial History of the American People. This course includes such topics as General and Special Industries, Commerce and Money, Manufacturing, and Transportation.

**Second Semester.** Economics. This course includes such topics as Production, Consumption, and Distribution of Wealth, the Theory of Exchange, Money and Credit, Monopolies, International Trade, Governmental Revenues and Expenditures. Texts: Moore's "Industrial History of the American People," Bullock's "Introduction to the Study of Economics."

## LATIN

**First Year.** The aim of the first year's work is to attain an accurate pronunciation, a thorough knowledge of all the regular forms of declension and conjugation together with the simpler principles of syntax, and a vocabulary of about eight hundred common words.

**Second Year.** Four books of Caesar's "Gallic War" are read. Regular forms are reviewed and essential irregular forms are learned in a systematic study of Latin grammar. There is regular practice in oral or written translation into Latin of exercises based on the text read, and sight translation is an important part of the year's work. Some attention is given to subject-matter.

**Third Year.** In the reading and interpretation of six of Cicero's orations the time is equally divided between language and subject-matter. The grammar is thoroughly reviewed in regular oral or written composition based on the text. An attempt is made to gain a definite knowledge of Cicero and his age, of the Roman government in Cicero's time, and of the city of Rome. The simpler letters are read at sight.

**Fourth Year.** The first six books of Virgil's "Aeneid" are read and interpreted. A special effort is made to approach the work as poetry. Prosody, figures of speech, mythological references, and poetical constructions are studied. Metrical reading is insisted upon. An idea of the "Aeneid" as a whole is gained by the sight reading of portions of the last six books. Two days each week are occupied during the first semester in a review of syntax and in prose composition.

## MATHEMATICS

The aim of the course in Mathematics is to cultivate the habits of independent reasoning, of accuracy of work, and of precision and clearness in the statement of conclusions and of the reason upon which they depend. First in importance is the intellectual training that makes the mind a ready and keen tool; second, the orderly acquisition of facts. Absolute thoroughness and work that increases in amount and difficulty with the student's increasing capacity are required. The student's efficiency is measured by his power to do. Throughout the course written reviews and test examinations are frequent.

### Algebra

**First Year.** Wentworth's "New School Algebra" through Quadratics. Special emphasis is placed on factoring and on the solution of equations. The object of the study is not only to acquire a knowledge of the subjects required for admission to the leading universities, but to secure the mental discipline for its own sake, and such a drill as looks to the use of the algebraic method in future study.

**Second Year.** Schultze's "Advanced Algebra." A review of the first year's work is made, and the textbook is completed. This work is supplemented by lectures on the theory of algebra, which form a most important part of the course.

**Third Year.** Fisher and Schwatt's "Higher Algebra," two hours a week. This course is given as an elective for students of marked mathematical ability, and is open only to those who have taken second-year algebra.

### **Geometry**

1. **Plane Geometry.** One year. Careful attention is given to construction, to clear and logical expression, and above all to the attainment of the power to do original work in geometry. The exercises of the textbook are supplemented by constant suggestions by the teacher for investigations.

2. **Solid Geometry,** three hours a week, during the first semester.

### **Trigonometry**

**Plane Trigonometry** and a brief study of logarithms and of the solution of the right spherical triangle, three hours a week, during the second semester.

## **SCIENCE**

### **Biology**

**Botany and Zoology** are each given as a full course of eight hours a week, for one year. The work in each is a combination of laboratory study, lectures, and recitations, with a careful notebook record of the work actually done by the student under the direction of the teacher. The ground covered and the methods employed are such as fully meet the requirements of any college to which the student might desire to go.

### Chemistry

The subject of Chemistry continues throughout the year, and includes all of the general principles, theoretical and practical, of inorganic chemistry, such as given in McPherson and Henderson's "Elementary Study of Chemistry." Recitations and individual laboratory work occupy not fewer than seven hours a week. A special effort is made throughout to develop the scientific habit of thought and to lead the student to observe the chemical changes constantly taking place. In the laboratory each student is furnished with a desk and all necessary reagents and apparatus, and is required to keep a complete record of the work done during the year.

A laboratory fee of eight dollars a semester and an additional deposit of five dollars are required. The loss by damage or destruction of apparatus will be deducted from the deposit of five dollars, and the balance refunded at the close of the semester.

### Physics

This course is designed to give the student a familiarity with the principal facts, laws, and theories of Physics. This is accomplished by the careful study of a text and by definite laboratory work for one year.

### SPANISH

**First Year.** Worman's "First and Second Spanish Reader"; Marion ye des Garennnes' "Spanish Grammar." Much attention is given to conversation.

**Second Year.** Advanced reading and short stories. Continuation of grammar and conversation.

### DRAWING

**First Year. Freehand Drawing.** Six hours a week. First semester: Elementary work from geometric solids and casts. ( $\frac{1}{2}$  unit.) Second semester: Advanced work in charcoal from casts and still life; flat wash in black and color. ( $\frac{1}{2}$  unit.)



**Second Year. Mechanical Drawing.** Six hours a week. First semester: Linear drawing; simple geometric problems; lettering. ( $\frac{1}{2}$  unit.) Second semester: Advanced geometric drawing; conic sections; projections. ( $\frac{1}{2}$  unit.)

### PHYSICAL EDUCATION

**Systematic class work.** This consists of vigorous drill with dumbbells, clubs, bar-bells, etc., for the men; for the women, general development exercises in walking and running, simple free movements, recreative games, and outdoor sports. Four hours a week.

**Progressive graded work** on various pieces of gymnastic apparatus, mat work, and gymnastic games for the men; more difficult free movements, relaxing exercises, mat work, walking drill, and dumbbells and games in the open air for the women. Four hours a week.

All students of the High School are required to take at least two hours a week of systematic gymnasium work.

# CATALOGUE *of* STUDENTS

## THE COLLEGE OF LIBERAL ARTS

The names of students are followed by the designation of their several class (Sr., Senior; J., Junior; S., Sophomore; F., Freshman; Sp., Special; U., Unclassified); the letter A indicates that the student is a candidate for the degree of A.B.; the letter S., that he is a candidate for the degree of S.B.

Adair, Pauline Mabel	Sp.,	—	El Centro
Adams, Gladys Lillian	F.,	A	Gardena
Adams, Lucy Burwell	Sr.,	A	Los Angeles
Adams, Lylè Harmon	F.,	A	Los Angeles
Aden, Fred	Sr.,	A	Los Angeles
Alber, Arthur	S.,	A	Los Angeles
Albert, Roberta Faythe	F.,	A	Pasadena
Aldrich, R. E. Lee	F.,	A	Dysart, Ia.
Allen, Howard Droste	S.,	A	Los Angeles
Allen, Lawrence W.	Sr.,	A	Los Angeles
Alley, Bess Houston	F.,	A	Los Angeles
Allin, Helena	S.,	A	Los Angeles
Allison, Lora Evangeline	F.,	A	Covina
Ames, Anna Ruth	S.,	A	Pasadena
Ames, Edwin Neal	J.,	A	Pasadena
Ames, Katherine Elizabeth	F.,	A	Los Angeles
Anderson, Hallam Hans	Sr.,	S	Los Angeles
Andres, Stella Clare	S.,	A	Los Angeles
Angier, Carroll Waite	U.,	—	Los Angeles
Ashmore, Grace Isabelle	J.,	A	Los Angeles
Austin, Daisy Morgan	J.,	A	Los Angeles
Bailey, Joseph James	F.,	A	Los Angeles
Baker, James Douglas	F.,	A	Los Angeles
Baldwin, Evangeline	Jr.,	A	Webster, Ind.
Ball, Esther E.,	J.,	A	Gardena

Ball, Milton Wesley	F.,	A	Ontario
Ballinger, Sabra Mae	S.,	A	Los Angeles
Barber, Esther	F.,	A	Los Angeles
Barker, Eula Mary	F.,	A	Alhambra
Barlow, Genevieve	S.,	A	Gardena
Barlow, Gladys Anna	F.,	A	Los Angeles
Barnes, Jessie B.	U.,	—	Long Beach
Barton, Ralph E.	F.,	A	Santa Monica
Bateman, Florence Matie	S.,	A	Los Angeles
Bayley, Eugene B.	Sp.,	—	Los Angeles
Beach, Lianda Ella	U.,	—	Mount Iron, Minn
Beasley, Edgar Franklin	F.,	S	South Pasadena
Beckett, Wilbur Archer	S.,	A	Los Angeles
Bell, Mabel A.	F.,	A	Gardena
Bell, Oliver William	Sr.,	A	Long Beach
Benefiel, George J.	Sr.,	A	Kingman, Kan.
Beggs, Alice Sinclair	U.,	—	Los Angeles
Bennett, Vivian Mason	F.,	—	Los Angeles
Benson, Charles	U.,	—	Wilmington
Benson, Christine M.	Sr.,	A	Los Angeles
Berman, Phosbus	F.,	A	Los Angeles
Berner, Leo Lewitte	F.,	A	Azusa
Bettinger, George Edward	Sr.,	A	Artesia
Betts, Dorothy Ellen	Sr.,	A	Los Angeles
Betts, D. Ethel	U.,	—	Los Angeles
Bishop, Ernest George	Sr.,	A	Los Angeles
Bissiri, Attilio Albino	S.,	A	Los Angeles
Bland, Adelina	U.,	—	Los Angeles
Blanford, Albert Thomas,	F.,	A	Los Angeles
Blank, John Philip	S.,	A	Los Angeles
Blakiston, John Housten	F.,	—	Tacoma, Wash.
Blalock, Ugene Uel	J.,	A	Porterville
Bloom, Felicitas M.	Sr.,	A	Los Angeles
Bloom, Mercedes E.	Sr.,	A	Los Angeles
Blum, Edith	U.,	—	Los Angeles
Bobbitt, Carl Medford	F.,	A	Riverside
Boice, Maude V.	U.,	—	Los Angeles
Bolton, May	U.,	—	Los Angeles

Bond, Bertha	J.,	A	Los Angeles
Borge, Nanon Georgeine	Sr.,	A	Los Angeles
Bostwick, Genevieve	S.,	A	Los Angeles
Bonelli, William George	J.,	A	Kingman, Ariz.
Bowen, Mary Spencer	F.,	A	Los Angeles
Bower, Cora Mae	Sp.,	—	Los Angeles
Bower, Forest Hill	Sp.,	—	Los Angeles
Bower, Helen Modjeska	F.,	A	Los Angeles
Bowers, William Sidney	S.,	A	Los Angeles
Boyd, Lillian Cecelia	U.,	—	Corona
Bradley, Floyd Edison	S.,	A	Chula Vista
Bradley, Thomas Henry	S.,	S	Los Angeles
Bradley, Wilbur Farrell	J.,	A	Chula Vista
Brentner, Lorilla Virginia	Sp.,	—	Pasadena
Bretthauer, Gertrude F.	F.,	A	Los Angeles
Bridge, David Alexander	F.,	A	Pasadena
Briggs, Herald L.	J.,	S	Santa Monica
Briggs, Howard	F.,	S	Santa Monica
Brinkmeyer, Emil Carl	F.,	A	Los Angeles
Brockman, Clayton E.	S.,	A	Los Angeles
Brown, Alice Claire	F.,	A	Los Angeles
Brown, Arthur C.	Sr.,	A	Glendale
Brown, Earl T.	J.,	S	Del-Rio, Texas
Brown, Florence Geneva	F.,	A	Sierra Madre
Brown, Herbert B.	F.,	A	Los Angeles
Brown, Louis Westervelt	S.,	S	Los Angeles
Brown, Sarah Fails	F.,	A	Huntington Park
Brown, William Carlos	J.,	A	Los Angeles
Brown, Zada Elmira	F.,	A	Riverside
Browning, Mary Leona	U.,	—	Los Angeles
Brubaker, Nicholas J.	Sr.,	A	Los Angeles
Brubaker, Martha M.	U.,	—	Los Angeles
Bruderly, Clara Elizabeth	Sp.,	—	North Benton, O.
Bruner, Joseph William	F.,	A	San Dimas
Bryson, John A.	U.,	—	Downey
Buck, Marie Emerson	S.,	A	Los Angeles
Buffum, Verna Mae	S.,	A	Long Beach
Bugbee, Helen Frances	F.,	A	Los Angeles
Bullis, Reina	U.,	—	Los Angeles

Bunker, A. Rosalie	J.,	A	Palm Springs
Bunker, Verne Thomas	F.,	A	Alhambra
Bunnell, Sarah Elecia	U.,	—	Pasadena
Burkhard, Paul Lawton	F.,	A	Long Beach
Burnham, Beatriz	F.,	A	Los Angeles
Burnight, E. R.	S.,	A	Los Angeles
Burnight, Ralph Fletcher	F.,	A	Los Angeles
Burnight, Ruth Elizabeth	F.,	A	Los Angeles
Burns, Lois Olga	F.,	A	Riverside
Burns, Phil Sheridan	S.,	A	Los Angeles
Burr, Clifford Fulton	J.,	A	Los Mochis, Mex.
Burton, Helen	F.,	A	Los Angeles
Burton, Lois R.	J.,	A	Los Angeles
Bush, Harriet Ann	F.,	A	Los Angeles
Butler, Ona	Sp.,	—	Hotchkin, Colo.
Butters, Archibald D.	Sp.,	—	Los Angeles
Butters, Lauretta M.	U.,	—	Long Beach
Calvert, Myrtle May	S.,	A	Los Angeles
Capanari, Mrs. Louise	Sp.,	—	Los Angeles
Campbell, Roy S.	Sp.,	—	Los Angeles
Canepa, Mary Illeonora	J.,	A	Los Angeles
Carlisle, George Vail	Sp.,	—	Los Angeles
Cannon, Mildred M.	F.,	A	Los Angeles
Carkeek, C. B.	F.,	S	Pasadena
Carlisle, Fred B.	Jr.,	A	Los Angeles
Carlisle, Malvina D.	Sr.,	A	Los Angeles
Carlson, Elsie Mathilda	S.,	A	Riverside
Carlson, Leonard Walter	F.,	A	Oleander
Carpenter, Sue	F.,	A	Los Angeles
Carrell, Goldie May	F.,	A	Gardena
Carse, Herbert Elwin	F.,	S	Los Angeles
Carter, Russell Earl	J.,	S	Mound City, Mo.
Cartmill, Eva Marguerite	F.,	A	Tulare
Cathcart, Franklin I	S.,	A	Los Angeles
Catudal, Annette Elia	S.,	A	Los Angeles
Cavins, Wilhelmina Victoria	F.,	A	Santa Ana
Chaffee, Herbert Norton	F.,	A	Pasadena
Chaffee, Mary	Sr.,	A	Pasadena
Chamberlin, Edward Joseph	F.,	A	Los Angeles



Chan, Caroline	Sr.,	A	Los Angeles
Chapman, Arthur	J.,	A	Los Angeles
Chapman, James Lowell	F.,	A	Los Angeles
Chapman, L. Sidney	S.,	A	Los Angeles
Charlesworth, Edith L.	U.,	—	El Monte
Chung, Albert Yet	F.,	A	Los Angeles
Chung, Philip W.	F.,	A	Los Angeles
Churchill, Estelle Louisa	U.,	—	Los Angeles
Claggett, Fern R.	Sp.,	—	Long Beach
Clark, Charles E.	Sr.,	S	Los Angeles
Clark, Essie	Sr.,	A	Huntington Park
Clark, Grace	S.,	A	Los Angeles
Clark, Herbert Fletcher	U.,	—	Alhambra
Clark, Judson Hunter	S.,	S	El Centro
Clark, Loren Tompkins	S.,	A	Los Angeles
Clark, Marian Weller	Jr.,	A	Los Angeles
Clark, Mary Agnes	Sr.,	A	Hollywood
Clark, Ray Henry	F.,	S	Huntington Park
Clark, Willis Wineld	J.,	A	Los Angeles
Clayton, Grant Elmore	F.,	A	Los Angeles
Clement, Hallowell F.	F.,	A	Los Angeles
Colburn, Walter E.	F.,	A	Riverside
Cole, Perry O.	U.,	—	Los Angeles
Colestock, Grace V.	U.,	—	Los Angeles
Colestock, Mary Alice	Sr.,	A	Portland, Ind.
Collins, Herbert W.	S.,	S	Baldwin Park
Comer, Mildred Amelia	F.,	A	Riverside
Conaty, Joseph, Jr.,	F.,	A	Los Angeles
Cone, Gladys Myra	J.,	A	Compton
Conrad, Elson Gilbert	S.,	A	Alhambra
Cook, Leona C.	F.,	A	Ontario
Cook, Nellie May	F.,	A	Ontario
Cookman, Alfred	J.,	A	Long Beach
Coomber, Doris Patricia	Sr.,	A	Los Angeles
Cooper, Edith M.	J.,	A	Pasadena
Core, Catherine	F.,	A	Los Angeles
Cornell, James H.	Sp.,	—	Los Angeles
Cottle, Katharine	S.,	A	Los Angeles
Couch, Esther Tanner	F.,	A	Los Angeles

Cox, E. Lester	Sr.,	A	Los Angeles
Craig, Gerald Allen	S.,	S	La Habra
Crandal, Jesse R.	U.,	—	Huntington Beach
Crane, Walter B.	U.,	—	Los Angeles
Cripe, Samuel O.	U.,	—	The Palms
Crise, Mary Elizabeth	F.,	A	Escondido
Cronkhite, Chas. Albert	F.,	S	Los Angeles
Crow, Emma Owena	J.,	A	Los Angeles
Crumley, E. Worden	F.,	A	Los Angeles
Cummings, Grace Josephine	F.,	A	Los Angeles
Dalin, Carl Arthur	Sr.,	A	Covina
Dallas, Ruby Gwendolyn	F.,	A	Ventura
Dallas, William J.	S.,	A	Ventura
Dallman, Lelia Ruth	J.,	A	Los Angeles
Damron, Milton Herbert	F.,	A	Anaheim
Dana, Eleanor Fairchild	F.,	A	Eau Claire, Wis.
Daniel, S. Josephine	J.,	A	Fullerton
Danielian, Arthur Charles	F.,	A	Los Angeles
Darmody, Louise F.	F.,	A	Los Angeles
Darnell, Mrs. Iva Alger	U.,	—	Los Angeles
Davids, Mark	F.,	A	Los Angeles
Davie, Marjorie	F.,	A	Santa Monica
Davies, Henrietta, Alma	J.,	A	Los Angeles
Davis, Earl Dearmond	F.,	A	Los Angeles
Davis, Eleanor Madeline	J.,	A	Los Angeles
Davis, Heloise Marie	S.,	A	Los Angeles
Davis, Thomas H.	Sr.,	A	Los Angeles
Davis, Ralph Emerson	Sr.,	A	Hollywood
Decker, John Harold	F.,	A	Los Angeles
Dennis, Alice Ruberta	F.,	A	Los Angeles
Deuel, Clyde Curtis	S.,	S	Delano
de Wit, Luella J.	Sp.,	—	Los Angeles
Difani, Leonard J.	F.,	A	Los Angeles
Dimmitt, Ralph B.	S.,	A	Huntington Park
Dodson, Corin	F.,	A	So. Pasadena
Doheny, Edw. Lawrence, Jr.	J.,	A	Los Angeles
Dolley, Helen Edna	Sr.,	A	Long Beach
Dolley, Lois Evelyn	F.,	A	Long Beach
Don Carlos, Mrs. Florence	Sp.,	—	Los Angeles

Doyle, John Robert	Sp.,	—	Glendale
Dresden, Ione Lillian	F.,	A	Los Angeles
Drew, Howard Porter	S.,	A	Springfield, Mass.
Dubin, Jennie	J.,	A	Los Angeles
Dungan, Elmer J.	S.,	A	Los Angeles
Dunham, Inez Dorothy	J.,	A	Los Angeles
Dunlap, Mary Elizabeth	F.,	A	Riverside
Durham, Lewis Earl	S.,	A	Manitou, Okla.
Durkee, Ruth Taylor	F.,	A	Los Angeles
Duvall, Pauline	J.,	A	Bakersfield
Dwire, Carrie E.	U.,	—	Hollywood
Dyar, Dorothy Margaret	S.,	A	Los Angeles
Early, Mrs. Della	J.,	A	Los Angeles
Eaton, Mrs. Alice	Sp.,	—	Mt. Washington
Eaton, Ruth Elizabeth	Sr.,	A	Los Angeles
Edwards Mayowen	S.,	A	Pasadena
Eisenberg, Kate	U.,	—	Los Angeles
Elliott, Mrs. Florence	F.,	A	Los Angeles
Elliott, Joseph Paul	F.,	A	Los Angeles
Epler, Nora Elizabeth	F.,	A	El Centro
Epley, James F.	U.,	—	Los Angeles
Epstein, Alfred	F.,	A	Los Angeles
Evans, Edward Manfred	S.,	A	Hollywood
Eveland, Ruth Lucile	J.,	A	Los Angeles
Farley, Floyd Wesley	F.,	A	Burbank
Farman, Margaret Anna	F.,	A	Napa
Farrel, Joe Webster	F.,	A	Los Angeles
Feltham, Dorothy E.	F.,	A	Long Beach
Ferguson, Carrie Hazel	F.,	A	Los Angeles
Ferl, Emily Matilda	Sp.,	—	San Pedro
Field, Fred Seymour	F.,	A	Los Angeles
Fielder, Forrest	F.,	A	Deming, N. Mex.
Fish, Dale O'leon	S.,	A	Chula Vista
Fisher, Howard Power	J.,	A	Los Angeles
Fisk, F. Gilmore	S.,	A	Tempe, Ariz.
Finch, Florence Winifred	S.,	A	Los Angeles
Fitch, Aura L.	Sr.,	A	Parsons, Kan.
Flickwir, Mary Gertrude	F.,	A	Los Angeles
Follette, Irvin W. C.	S.,	A	Los Angeles

Forsythe, Mildred C.	Sp.,	—	Los Angeles
Foster, Emory Alfred	Sr.,	A	Los Angeles
Fowler, Mildred Aileen	F.,	A	Los Angeles
Fox, Paul Nathaniel	J.,	A	Pomona
Franklin, Questa Lois	S.,	A	Los Angeles
Frasher, Lloyd A.	F.,	A	Modesto
Frasher, Roscoe L.	J.,	A	Modesto
Fredricks, Agatha	U.,	—	Los Angeles
Freed, Morris	Sr.,	A	Los Angeles
Freeman, Harold Austin	J.,	A	Riverside
Freese, Theron	S.,	A	Hutchinson, Kan.
Friend, Gertrude	U.,	—	Bangor, Me.
Friend, Robert Sherman	F.,	A	Inglewood
Fuller, Ernest Leroy	F.,	A	Ontario
Fuller, Iona Faye	S.,	A	Ontario
Fullerton, Winifred	U.,	—	Los Angeles
Funk, Maude Elizabeth	S.,	A	Hollywood
Furber, Marion Ruth	J.,	A	Los Angeles
Fybush, Irma	F.,	A	Los Angeles
Gage, B. Marie	J.,	A	Pasadena
Gaines, Paul	F.,	A	Monrovia
Gard, Clare de Wolfe	S.,	S	Monrovia
Gard, Earle William	S.,	S	Monrovia
Gardner, Eleanor A.	J.,	A	New York City
Garrison, Olin Herndon	S.,	A	Los Angeles
Garvey, Clayton H.	F.,	S	Corona
Gaud, Margaret	U.,	—	Los Angeles
Gay, Edith A. B.	Sp.,	—	Los Angeles
Gee, Denson Wm.	F.,	A	Long Beach
Geiger, Essie	U.,	—	Los Angeles
Geissinger, Wayland	S.,	A	Los Angeles
George, Harry Bushnell	J.,	A	Los Angeles
Gilbert, Mabel Alice	U.,	—	Los Angeles
Gill, Alice B.	Sr.,	A	Armstad, N. Mex.
Gillett, Lorenzo R.	S.,	A	Sterling, Colo.
Gilson, Bessie Louise	S.,	A	Los Angeles
Gleiss, Irene E.	U.,	—	Los Angeles
Goodfellow, Jack	F.,	A	Englevalle, N. D.
Goodwin, Paul McCully	S.,	A	Riverside

Goodwin, Ralph T.	Sr.,	A	Riverside
Gould, Rita Corinne	Sp.,	—	Mishawaka, Ind.
Graham, John, Jr.	F.,	A	Tacoma, Wash.
Graham, Katharine M.	S.,	A	Long Beach
Grant, Ivy Mary	J.,	A	Hanford
Grantham, Pauline	S.,	A	Los Angeles
Graves, Rachael Elvira	J.,	A	Los Angeles
Gray, Doctor Etta	Sp.,	—	Los Angeles
Gray, Gretta Vera	S.,	A	Los Angeles
Gray, Lester Marion	Sr.,	A	Pasadena
Gray, Mary Caroline	Sp.,	—	Los Angeles
Green, Eleanor Boynton	Sr.,	A	Hollywood
Greene, Marion S.	Sr.,	A	Los Angeles
Greene, Portia	F.,	A	Los Angeles
Greene, Thos. Augustus	F.,	A	Los Angeles
Gridley, Helen	F.,	A	Los Angeles
Grieve, Jessie Marie	S.,	A	Los Angeles
Griffin, Herschel R.	S.,	A	Los Angeles
Grimes, William F.	S.,	A	Pasadena
Grinnell, George Henry	U.,	—	Los Angeles
Grua, Clifford Perry	S.,	A	South Pasadena
Gurney, Barbara E.	F.,	A	Hollywood
Guthridge, Russell M.	S.,	A	Los Angeles
Hackney, Paul Claire	F.,	A	Riverside
Hada, Katsuki	J.,	A	Los Angeles
Halfpenny, Anna Grace	S.,	A	Ontario
Hall, Arden J.	F.,	A	Santa Ana
Hall, Hal G.	Sp.,	—	Los Angeles
Hall, Leonard S.	F.,	A	Los Angeles
Hamer, Hiram Joseph	F.,	A	Los Angeles
Hammons, Cora Mabel	J.,	A	Pasadena
Hand, La Verne	S.,	A	Los Angeles
Handcock, Elise Catherine	F.,	A	Los Angeles
Hannah, Ruby Ellen	S.,	A	Montebello
Hanning, Bessie Amelia	J.,	A	Los Angeles
Hanning, Esther Merl	S.,	A	Santa Ana
Hanning, Ida Louise	J.,	A	Los Angeles
Hansen, Adolph M.	F.,	A	Los Angeles
Hansen, Astrid J.	J.,	A	Los Angeles



Haraszthy, Mrs. Helen A.	Sp.,	—	Los Angeles
Harkness, Hillary Stephen	S.,	A	Hemet
Harper, Earle Raymond	F.,	A	Los Angeles
Harrangue, Olga	U.,	—	Los Angeles
Harris, Gladys Reo	F.,	A	Pasadena
Harris, Harold Ross	S.,	S	Los Angeles
Harris, Leonidas Rosseau	F.,	A	Orange
Harrod, Sarah Hazel	F.,	A	Santa Monica
Hartford, Emile Augustus	F.,	A	Los Angeles
Hartley, Bertha	F.,	A	Colton
Hathaway, Adeline	F.,	A	Los Angeles
Hathaway, Gladys	J.,	A	Prescott, Ariz.
Hawkins, Jessie Meredith	J.,	A	Los Angeles
Hazeltine, Roland Phelps	F.,	S	Los Angeles
Hedrick, Albert Earl	F.,	A	Los Angeles
Heichert, Helen	F.,	A	Los Angeles
Henderson, Carl Rankin	J.,	A	Los Angeles
Hendrickson, Althea Lenora	S.,	A	Santa Ana
Herzikopf, Sam Sidney	F.,	A	Los Angeles
Hewitt, Edward Mercer	S.,	S	Ontario
Hibbard, Elizabeth	U.,	—	Pasadena
Hicks, Vera Valine	S.,	A	Gardena
Hicks, Robert Stanley	S.,	A	El Monte
Hickman, Lillie Alice	U.,	—	Alhambra
Hiett, Myrtle	U.,	—	Sidney, Neb.
Higgins, Elmer	J.,	A	Los Angeles
Hill, Breta Burnice	F.,	A	Mecca
Hill, Gladys Grace	S.,	A	Los Angeles
Hill, Stephenia E.	Sr.,	A	Los Angeles
Hinsdale, Jennie Ruth	S.,	A	Los Angeles
Hinsdale, William	J.,	A	Los Angeles
Hoagland, Bessie Mildred	J.,	A	Raymond, Wash.
Hobbs, Allen Thurman	F.,	A	Los Angeles
Hodgkins, Edith May	Sr.,	A	Los Angeles
Hodgkins, Josephine M.	U.,	—	Los Angeles
Hodson, Ross N.	Sr.,	A	La Habra
Hoechlin, Carl Philip	F.,	A	Hollywood
Hoenshell, Hattie	S.,	A	Bakerseld
Hoffman, Elmer Henry	F.,	A	Los Angeles

Hogoboom, Florence June	F.,	A	Los Angeles
Hokersen, Suzuki	Sp.,	—	Los Angeles
Holfman, Peter D.	J.,	A	Tribune, Kan.
Holland, Leland W.	J.,	A	Pasadena
Hollister, Augustus	F.,	A	Venice
Holt, Frances Hazel	Sp.,	—	Los Angeles
Hornighausen, George A.	F.,	A	Gardena
Honner, Robert Arleigh	F.,	A	Los Angeles
Hopkins, Leon Oscar	F.,	S	Los Angeles
Horikoshi, Tokujiro	J.,	A	Los Angeles
Horner, Anna Josephine	U.,	—	Los Angeles
Houk, George D.	U.,	—	Los Angeles
House, Ellis H.	S.,	S	Santa Ana
Howard, Ernest Clyde	S.,	S	Ventura
Howe, Paul L.	F.,	A	Los Angeles
Howze, Katherine L. (Mrs.)	U.,	—	Los Angeles
Huet, Esther Ruth	Sr.,	A	Los Angeles
Hughes, Clifford Evans	S.,	A	Los Angeles
Hughes, Elise	F.,	A	Los Angeles
Hughes, Hal Durham	S.,	A	Los Angeles
Humphries, Grace Winifred	F.,	A	Los Angeles
Hunt, Fanny Montague	U.,	—	Los Angeles
Hunt, Harry Weston	J.,	A	Santa Monica
Hurlbut, Ethel Abbie	S.,	A	Los Angeles
Hurlbut, Mazie Janette	Sr.,	A	Los Angeles
Hurt, Bertha M.	Sp.,	—	Pomona
Huse, Lucy Marie	F.,	A	Los Angeles
Hutchison, Mrs. Emma R.	F.,	A	Los Angeles
Hutchinson, John Edgar	F.,	A	Los Angeles
Huxtable, Richard Byron	F.,	A	Strathmore
Ingersoll, C. Maude	U.,	—	Los Angeles
Inwood, Gertrude Alfreda	S.,	A	Los Angeles
Inwood, Pauline Marian	F.,	A	Los Angeles
Irvine, Cecilia Robertson	Sr.,	A	Los Angeles
Ives, Carolyn M.	Sr.,	A	Los Angeles
Jackson, Frances E.	Sr.,	A	Glendale
Jackson, Horace A.	Sp.,	—	Los Angeles
Jacobson, Arthur Leonard	S.,	A	Los Angeles
Jacoby, Edgar H.	Sp.,	—	San Jose

Jaderquist, Geo. Andrew	S.,	A	Livingston
James, George W.	S.,	A	Hollywood
Janes, Edmond Kelley	F.,	A	Los Angeles
Jayne, Ralph T.	F.,	S	Santa Ana
Jenkins, Mary Florence	U.,	—	Pasadena
Jensen, Robert Stanly	F.,	A	Los Angeles
Jepson, William Augustus	Sr.,	A	Los Angeles
Johnson, Elmer Harvey	Sp.,	—	Los Angeles
Johnson, Hobart Hanson	F.,	A	Springfield, Mass.
Johnson, Ruth Elizabeth	S.,	A	Pasadena
Johnson, Verner	F.,	A	Los Angeles
Johnson, William Bede	S.,	A	Glendale
Johnston, Effie Truitt	F.,	A	Van Nuys
Jones, Bessie Helen	J.,	A	Los Angeles
Jones, Elmer Harrison	Sr.,	S	Portsmouth, O.
Jones, Mrs. Sarah A.	Sp.,	—	Los Angeles
Jordan, Henry E.	F.,	A	Los Angeles
Jordan, Wayne	S.,	A	Los Angeles
Judson, Louise F.	U.,	—	Los Angeles
*Kadoya, Genichi	J.,	A	Los Angeles
Kallstedt, Frances E. E.	F.,	A	Pasadena
Kalliwoda, F. Helen	Sr.,	A	Los Angeles
Kalliwoda, Gladys May	S.,	A	Los Angeles
Kato, Shigejiro	Sp.,	—	Los Angeles
Kauffman, Florence Louise	F.,	A	Los Angeles
Kawauamoto, Masasuke	J.,	S	Los Angeles
Kazanjian, Karl P.	F.,	A	Fowler
Keefe, Margaret Elizabeth	U.,	—	Los Angeles
Keen, Margaret Ann	S.,	A	Whittier
Keith, Charles Angus	S.,	S	Mina, Nev.
Kellar, Naomi	F.,	A	Los Angeles
Kellogg, Kate Craig	U.,	—	Los Angeles
Kelly, Fred Warren	Sp.,	—	El Modeno
Kelly, Julia Mae	Sr.,	A	Los Angeles
Kelsey, James Clayton	S.,	A	Long Beach
Kendall, Joseph S.	F.,	A	Los Angeles
Kendrick, Agnes	Sr.,	A	Riverside
Kent, Arthur	F.,	A	Los Angeles
Kern, Helen	F.,	A	Los Angeles

Kersey, Cleon	J.,	A	Los Angeles
Kersey, Vierling	U.,	—	Los Angeles
Kim, Kwan You	S.,	A	Los Angeles
Kimball, Donald F.	F.,	A	Los Angeles
Kinder, Evelyn Cannon	F.,	A	Los Angeles
Kinney, Harold Hile	F.,	A	Pomona
Kinosita, James Otoichi	Sp.,	—	Los Angeles
Kirby, Charlotte	S.,	A	Los Angeles
Kirkpatrick, Annie Istalena	S.,	A	Los Angeles
Kneen, William Edger	F.,	A	Santa Ana
Knott, James Proctor	J.,	A	Los Angeles
Kondo, Frank Nob	J.,	A	Los Angeles
Kraus, O. K.	F.,	A	Los Angeles
Krouss, William Alfred	F.,	A	Los Angeles
Kuehny, M. Simon	U.,	—	Los Angeles
Kuhnle, Helene Louise	U.,	—	Los Angeles
Lacy, James Samuel	U.,	—	Huntington Park
La Due, Wendell Richard	F.,	S	Wheeling, W. Va.
La Grange, Mary Barnes	F.,	A	Hollywood
Lane, Rita M.	F.,	A	Yucaipa
Lanfeld, Olive Ruth	S.,	A	Los Angeles
Langston, Joyce	S.,	A	Los Angeles
Langston, Mary Catherine	U.,	—	Los Angeles
Langton, Mary	U.,	—	Los Angeles
Laning, Emma Mae	S.,	A	Los Angeles
La Port, Mrs. Lura A.	S.,	A	Los Angeles
Lawler, James Kenneth	F.,	A	Gardena
Lawler, John Wisely	F.,	A	Gardena
Lee, Ernest Orson	J.,	A	Ontario
Lee, Ettie	J.,	A	Thatcher, Ariz.
Lee, Frank Shui Kim	F.,	A	Honolulu, Oahu
Lee, Lyman Charles	F.,	A	Modesto
Lee, Mary Roselia	F.,	A	Modesto
Lehr, Mary Henrietta	Sp.,	—	Redlands
Leimkuhler, Macie Edna	S.,	A	Pasadena
Lenvig, Bessie C.	Sr.,	A	Los Angeles
Le Roy, Joseph Monroe	F.,	A	Los Angeles
Lewis, Paul Alfred	F.,	A	Riverside
Lieberg, Helenita	F.,	A	Los Angeles

Lightfoot, Verona Cecilia	F.,	A	Los Angeles
Lindsey, Hazel M.	U.,	—	Los Angeles
Litterer, Bessie Katharine	F.,	A	Los Angeles
Little, Walter	F.,	A	Merced
Livernash, Leo Dean	J.,	A	Huntington Beach
Livernash, Leonard Otis	S.,	A	Huntington Beach
Lockard, Alvin L.	J.,	S	Los Angeles
Locke, Ruth M.	Sr.,	A	Los Angeles
Lockett, Catherine Jeanette	U.,	—	Los Angeles
Long, Elsie M.	U.,	—	Los Angeles
Long, Isabel Lillian	S.,	A	Los Angeles
Long, Laura Deacon	F.,	A	Los Angeles
Long, Tirrell	S.,	A	Los Angeles
Long, Wilbur H.	J.,	A	Los Angeles
Longmoor, Walter Moffatt	J.,	A	Los Angeles
Lopizich, Ivo John	F.,	A	Los Angeles
Lovejoy, John Cranston	F.,	A	Los Angeles
Lowell, Maude Whitman	J.,	A	Alhambra
Lowrey, Rachel Gertrude	F.,	A	Wilmington
Lucas, Lawrence V.	S.,	A	Visalia
Ludden, Florence Marguerite	J.,	A	Long Beach
Lyon, Arthur J.	S.,	A	Glendale
McCarthy, Irene Mary	U.,	—	Los Angeles
McCormick, Edwin Rice	F.,	A	Ashland, Ore.
McCoy, John Carl	S.,	S	San Fernando
McCrea, Alta Margueritte	F.,	A	Ontario
McCurdy, Bernice Vivian	J.,	A	Pasadena
McDermott, George A.	U.,	—	Gardena
McDonald, George James	Sr.,	A	Los Angeles
McDowell, Percy Cartwright	F.,	A	Pasadena
McElree, D. Maurice	F.,	A	Santa Ana
McEuen, Fred L.	Sr.,	A	Los Angeles
McEuen, Isabel	F.,	A	Los Angeles
McEuen, Virgil Lester	S.,	A	San Jacinto
McFarland, Harry Blaine	Sr.,	A	Los Angeles
McGorray, William Edward	S.,	A	Wallace
McGuire, Mary	S.,	A	Los Angeles
McKinney, Paulyne G.	S.,	A	Los Angeles
McKnight, James S.	J.,	A	Los Angeles



McMahon, Madeline Vada	F.,	A	Ocean Park
McManis, Nancy	S.,	A	Los Angeles
McMaster, Robert Neer	J.,	S	Los Angeles
McMillan, Wm. Claud	U.,	—	Los Angeles
McMillan, Marie Merrill	U.,	—	Gardena
McMore, Blanche Aileen	U.,	—	Los Angeles
McNair, Mary	S.,	A	Los Angeles
McNichols, Chas. Longstreth	F.,	A	Los Angeles
MacIntyre, Carlyle Ferren	J.,	A	Los Angeles
Magnuson, Edla Charlotte	J.,	A	Los Angeles
Mahoney, Alice Lillian	J.,	A	Los Angeles
Maney, Rachel Adaline	F.,	A	Ocean Park
Mansfield, Ruth Wynne	J.,	A	Los Angeles
Marks, Inez May	J.,	A	Los Angeles
Marks, Theodore William	F.,	A	Long Beach
Marley, Mary Evelyn	F.,	A	Los Angeles
Marshall, Carrie Viola	F.,	A	San Gabriel
Martens, Frieda Marie	F.,	A	Los Angeles
Martie, Menga Anna	S.,	A	Los Angeles
Martin, Eva Esther	S.,	A	Santa Ana
Martin, George McMillan	S.,	A	Beaumont
Martindale, Edward	F.,	A	Los Angeles
Marvin, Cloyd H.	Sr.,	A	Los Angeles
Marvin, Hallie	F.,	A	Los Angeles
Marxen, Ed. H.	F.,	A	Piper, Kan.
Mason, Bessie Hutchinson	U.,	—	Los Angeles
Masters, Leonard Cuthbert	F.,	A	Riverside
Masters, Queen	Sr.,	A	Los Angeles
Mathews, Nettie Alice	F.,	A	Los Angeles
Matsuhara, Iwao.	S.,	A	Los Angeles
Matthews, John Prentiss	Sp.,	—	San Bernardino
Maus, Mrs. Mildred Irene	Sp.,	—	Los Angeles
Mauzy, Jessie Ethel	Sr.,	A	Pasadena
Maxfield, Marshall Joseph	S.,	S	Fallbrook
Menges, John B.	F.,	A	Los Angeles
Menn, Edna Irene	S.,	A	Los Angeles
Mentzer, Marion A.	Sr.,	A	Los Angeles
Mieding, Ferdinand Bernard	F.,	A	Los Angeles
Miller, Edwin W.	J.,	A	Los Angeles

Millar, Vera A. A.	J.,	A	Los Angeles
Millar, Mrs. Louise P.	Sp.,	—	Los Angeles
Miller, Estelle	Sr.,	A	Los Angeles
Miller, Leon Howard	F.,	A	Wenatchee, Wash.
Miller, Marjorie	F.,	A	Los Angeles
Miller, Ross V.	Sp.,	—	Los Angeles
Miller, Stewart S.	F.,	A	La Mirada
Mills, Mrs. K. Muriel	J.,	A	Los Angeles
Min, Chan H.	J.,	A	Los Angeles
Moore, Albert Reed	J.,	A	Pasadena
Moore, Camille	Sr.,	A	Los Angeles
Moore, Hazel	F.,	A	Los Angeles
Moorhead, Edward W.	F.,	A	Los Angeles
Morgan, Helen Alethea	Sp.,	—	Madison, Ia.
Moriya, Toshiki	F.,	A	Los Angeles
Morrison, Clyde R.	S.,	A	Los Angeles
Morrow, Ray Leslie	Sr.,	A	Glendale
Morse, Arthur Burton	F.,	A	Los Angeles
Moseley, Corliss	F.,	A	Long Beach
Mount, Mrs. Florence D.	U.,	—	Los Angeles
Mulford, Louise	F.,	A	Peoria, Ill.
Multer, Hugh James	S.,	A	Los Angeles
Murray, Phillips Welwood	F.,	A	Los Angeles
Naismith, Helen Agnes	F.,	A	Los Angeles
Naftzger, Idalia L.	U.,	—	Los Angeles
Nau, Converse	F.,	A	Santa Ana
Neill, Frances Thayer	Sr.,	A	Los Angeles
Nelson, Elmer Serano	S.,	A	Los Angeles
Nelson, Jennette	S.,	A	Los Angeles
Netz, Joseph	Sr.,	A	Los Angeles
Newell, Kenneth Cuthbert	Sr.,	A	Pasadena
Newland, Clinton C.	F.,	A	Los Angeles
Nichols, Alma	S.,	A	Los Angeles
Nicholson, Marian	F.,	A	Gardena
Nider, Gerald Knowlton	F.,	A	Los Angeles
Noble, Annie Rose	U.,	—	Los Angeles
Nogle, Alta Grace	U.,	—	Los Angeles
Northrop, Margaret Luella	Sr.,	A	Los Angeles

Oakes, Leon Jay	U.,	—	El Segundo
Oakes, Mary Ethel	S.,	A	Los Angeles
Oakes, Mervin E.	Sr.,	A	Los Angeles
Obear, Mary Katharine	Sr.,	A	Los Angeles
Oerter, Eunice	Sr.,	A	Anaheim
Oertly, Bernhard	S.,	A	Garden Grove
Olson, Emery E.	J.,	A	Los Angeles
Olson, Lawrence Edward	F.,	A	Los Angeles
Olson, Reuel Leslie	F.,	A	Los Angeles
Oman, Mrs. Margaret E.	Sp.,	—	Los Angeles
O'Neil, Eileen	S.,	A	Los Angeles
Oster, Donald	F.,	S	Los Angeles
Padrick, Lucinda L.	S.,	A	Los Angeles
Palmer, Chas. W.	J.,	S	Compton
Palmer, Elmer B.	F.,	A	Compton
Palmer, Percy Edward	F.,	A	Long Beach
Parker, Anne Geraldine	F.,	A	Los Angeles
Parratt, Sydney L.,	S.,	A	Los Angeles
Parrish, Ada Lucile	J.,	A	Hanford
Patterson, Carroll E.	F.,	A	Omaha, Neb.
Patterson, Claude Lyman	F.,	A	Tulare
Patton, Frank Martin	F.,	A	Los Angeles
Patton, Stanley F.	S.	A	Los Angeles
Paul, Florence Thornburg	S.,	A	Los Angeles
Paxon, Beatrice Mary	S.,	A	Ontario
Peebles, Dorothy E.	F.,	A	Los Angeles
Pentland, Gertrude Aileen	J.,	A	Los Angeles
Percy, Mary Fitzpatrick	U.,	—	Azusa
Perkins, Frances	J.,	A	Los Angeles
Perry, Lillian Emma	Sr.,	A	Santa Monica
Perry, Sue Hammill	Sr.,	A	Fullerton
Pesqueira, Louisa Charlotte	U.,	—	San Fernando
Peterson, Mary Ellen	U.,	—	Los Angeles
Peterson, Mildred Elizabeth	F.,	A	Los Angeles
Petterson, Ivan Stanley	S.,	S	Los Angeles
Phelps, Grace L.	U.,	—	Los Angeles
Phillips, Edna	F.,	A	Los Angeles
Pierce, Charles Edward	S.,	S	Los Angeles
Pierce, Juliet Rich (Mrs.)	Sr.,	A	Los Angeles

Pinkiert, Gertrude	U.,	—	Los Angeles
Pinnell, Homer Francis	Sr.,	A	Los Angeles
Platt, Mary Lucile	U.,	—	Los Angeles
Poggi, Ruby Adelaide	F.,	A	Los Angeles
Poindexter, Romaine Le M.	U.,	—	Los Angeles
Pollick, R. E. Thos.	U.,	—	Los Angeles
Porter, Margaret Annette	F.,	A	Los Angeles
Porter, Roy	U.,	—	Los Angeles
Posson, Harry	F.,	A	Los Angeles
Potter, Mrs. Nellie I.	U.,	—	Los Angeles
Priester, Edwin	F.,	A	Los Angeles
Prince, Harold Samuel	Sr.,	A	Pasadena
Prince, Mary Emily	F.,	A	Hemet
Prindle, George H.	F.,	A	Los Angeles
Prior, Gary Earl	F.,	A	Riverside
Pritchardt, Sallie B.	Sr.,	A	Beverly Hills
Proctor, Sarah Ethyl	J.,	A	Los Angeles
Pursell, Della Inez	F.,	A	Tipton
Pursell, Gertrude Winifred	F.,	A	Tipton
Pyle, Clair Coyle	F.,	A	Pasadena
Quan, Harry S.	S.,	S	Los Angeles
Quin, Franklin Horton	S.,	S	San Diego
Quitow, Florence	F.,	A	Los Angeles
Ramsey, Walker M.	J.,	A	Los Angeles
Rapp, Vivian	Sp.,	—	Los Angeles
Rapp, Carrie Keeler	U.,	—	Los Angeles
Rasmus, Harry	S.,	A	Long Beach
Raw, Harold M.	F.,	A	Los Angeles
Rathwell, Thomas Raymond	U.,	—	Los Angeles
Read, Wendell Phillips	Sr.,	A	El Modena
Reaves, Bessie Franklin	Sr.,	A	Los Angeles
Rebber, Leland Lester	J.,	A	Los Angeles
Record, Marjorie	F.,	A	Los Angeles
Reddick, Harry Ernest	Sr.,	S	Ventura
Redding, Margaret Bell	U.,	—	Los Angeles
Reed, Freeman Albert	F.,	A	Los Angeles
Reinhard, Charles John	U.,	—	Los Angeles
Renison, Aileen H. E.	S.,	A	Los Angeles
Repath, Ruth Marie	J.,	A	Los Angeles

Retz, Myra Esther	J.,	A	Los Angeles
Reynolds, Annie	U.,	—	Los Angeles
Reynolds, C. Anita	F.,	A	Covina
Rhodes, Grace Marie	Sp.,	—	Los Angeles
Rice, E. Louise	U.,	—	Los Angeles
Richards, Ethel Estelle	Sr.,	A	Los Angeles
Richards, Inez Naoma	U.,	—	Los Angeles
Richards, Marsella Louise	U.,	—	Los Angeles
Richards, M. Winifred	Sr.,	A	Los Angeles
Richey, Bernice	Sr.,	A	Los Angeles
Rineheart, Mary Gibbs	U.,	—	Los Angeles
Ritter, Harvey R.	Sr.,	A	Eddy, Okla.
Roalfe, Margaret	J.,	A	Los Angeles
Roberts, Faith	U.,	—	San Fernando
Robertson, Jessie Thacher	U.,	—	Los Angeles
Robinson, Nester Douglass	F.,	A	El Toro
Rodier, Burton Norman	S.,	A	Los Angeles
Rogers, Islay Caroline	S.,	A	Los Angeles
Rohrbacher, George Henri	F.,	A	Stockton
Roome, Mildred Florence	F.,	A	Los Angeles
Rorick, Walter B.	F.,	A	Los Angeles
Rosenberger, Helen Kendall	S.,	A	Los Angeles
Ross, Elinor Cordelia	F.,	A	Pasadena
Ross, Fred Harmon	Sr.,	A	Inglewood
Ross, Mrs. Natalie Metcalfe	J.,	A	Los Angeles
Runkle, Clarence B.	S.,	A	Los Angeles
Rupp, George Buehler	F.,	A	Los Angeles
Rowland, Marguerite Helen	Sr.,	A	Los Angeles
Ryland, Victor Gordon	J.,	A	Los Angeles
Sadicoff, Minnie E.	Sr.,	A	Los Angeles
Saito, Waichi	Sr.,	A	Los Angeles
Sakaizawa, Iohane Faso	Sp.,	—	Los Angeles
Sander, Mrs. Augusta S.	Sp.,	—	Los Angeles
Sanders, Sue Elizabeth	F.,	A	Los Angeles
Sanger, Francis Irving	U.,	—	Los Angeles
Sarnighausen, Olga	S.,	A	Los Angeles
Sato, Kennosuke	Sp.,	—	Los Angeles
Satoh, Seiji	J.,	A	Los Angeles
Savage, Emerson Clark	F.,	A	Long Beach



Schabaram, Marie Louise	F.,	A	Los Angeles
Schlecht, Martha	S.,	A	Los Angeles
Schenck, Vera Leone	Sp.,	—	Santa Monica
Schick, Charles J.	F.,	A	Tropico
Schlotte, Nellita Fern	F.,	A	Los Angeles
Schlueter, Mrs. Katherine	U.,	—	Ocean Park
Schmitt, Katherine Cecil	Sr.,	A	Los Angeles
Schmitz, Paul Gaston	S.,	A	Los Angeles
Schmitz, Victorine Annette	F.,	A	Los Angeles
Schnoor, Gladys Blanche	F.,	A	Burbank
Schoeffel, Raymond L.	U.,	—	South Pasadena
Schoeller, Marjorie Virginia	F.,	A	Los Angeles
Schoenau, William H. Jr.	Sr.,	A	Los Angeles
Schooling, George P.	U.,	—	Warrensburg, Mo.
Schubert, Will	J.,	A	Watts
Schultz, Bennet Roy	Sr.,	S	Los Angeles
Schultz, Florence Trudy	F.,	A	Santa Ana
Schultz, Lawrence Henry	F.,	A	Fullerton
Schweichhardt, Fred Wm.,	F.,	S	Escondido
Schwarke, Katherine	F.,	A	Los Angeles
Scott, Clifford Clark	F.,	A	Monrovia
Scott, Garnet Albert	F.,	A	Riverside
Scott, Hazel Victoria H.	F.,	A	Los Angeles
Scovel, Edith Savinia	S.,	A	Los Angeles
Seaton, Chas. Wm.	F.,	A	Riverside
Sebastian, Chas. F.	F.,	A	Los Angeles
Seckler, Elsie	Sr.,	A	Los Angeles
Sedweek, Edna Marguerite	F.,	A	Los Angeles
Seeley, Blanche M.	U.,	—	Los Angeles
Segerstrom, Esther Louise	F.,	A	Santa Ana
Sellar, Georgena Susannah	S.,	A	Los Angeles
Sexton, Andrew Donald	F.,	A	Los Angeles
Seymour, Lawrence	Sp.,	—	Los Angeles
Shaff, Amy	U.,	—	Eagle Rock
Shaffer, Grace Leone	S.,	A	Huntington Beach
Shakley, Martin Frederick	F.,	A	Los Angeles
Sharp, Luther	S.,	A	Tulia, Tex.
Shay, Carleton Carlisle	F.,	A	Los Angeles
Shepherd, Bayliss Franklin	F.,	A	Los Angeles

Sherman, Alice M.	U.,	—	Los Angeles
Sherman, Edna Virginia	Sr.,	A	Pasadena
Shidler, Lois Lillian	Jr.,	A	Long Beach
Short, Frank H., Jr.	J.,	A	Fresno
Shultz, Myrtle	J.,	A	Pasadena
Shumway, Charles Wm.	J.,	A	Los Angeles
Shute, Jeannie	U.,	—	Huntington Park
Silke, Victor Stanley	S.,	A	Los Angeles
Silver, Andrew Morgan	Sr.,	A	El Monte
Silver, Selena	Sr.,	A	Ocean Park
Silverstone, Myron Wilk	U.,	—	Los Angeles
Silverstone, Seymour	U.,	—	Los Angeles
Silvins, Dorothy Marguerite	F.,	A	Los Angeles
Simmons, Isabel	F.,	A	Los Angeles
Simpson, Eddie	F.,	A	San Diego
Skeele, Franklin Bosworth	F.,	A	Los Angeles
Smale, Dorothy Morse	F.,	A	Santa Monica
Smart, Albra Mary	F.,	A	Santa Ana
Smith, Clinton Bombaugh	F.,	A	San Diego
Smith, Ethelynne M.	J.,	A	Long Beach
Smith, F. Marion	S.,	A	Los Angeles
Smith, George Albert, Jr.	F.,	A	Corcoran
Smith, Gerald F.	F.,	A	Los Angeles
Smith, Harold James	Sr.,	A	Los Angeles
Smith, Helen May	J.,	A	Los Angeles
Smith, Lloyd Scott	F.,	S	Los Angeles
Smith, Lucy Mae	Sp.,	—	Santa Paula
Smith, Mabel E.	J.,	A	Los Angeles
Smith, Margaret Horrell	U.,	—	Los Angeles
Smith, Stephen Lloyd	S.,	A	Los Angeles
Smith, Wallace P. V.	F.,	A	Kingsburg
Smith, Wesley Vance	S.,	A	Los Angeles
Snowden, Margaret	J.,	A	Los Angeles
Snowden, Mildred Emma	J.,	A	Los Angeles
Snyder, Albert Byron	U.,	—	Azusa
Snyder, Elizabeth	S.,	A	Los Angeles
Snyder, Evelyn W.	U.,	—	Los Angeles
Snyder, Helen D.	Sr.,	A	Los Angeles
Sokoloff, Lillian	Sr.,	A	Los Angeles

Sowden, Harry	S.,	A	Los Angeles
Spaeth, Walter Herbert	F.,	A	Los Angeles
Specht, Martha Helen	J.,	A	Los Angeles
Spencer, Reuel Madison	F.,	A	Los Angeles
Spriggs, Lilian Irma	Sr.,	A	Los Angeles
Sprotte, Chas. Wm.	Sr.,	S	Covina
Squire, James Herbert	S.,	A	Los Angeles
Stafford, Miriam F.	U.,	—	Los Angeles
Stagg, Ira James	S.,	A	Anaconda, Mont.
Stannard, Ronald Fern	F.,	A	South Pasadena
Stark, Leander W.	S.,	A	Anaheim
Steed, Daniel V.	Sr.,	A	Berkeley
Steele, Mark Twain	F.,	A	Los Angeles
Steele, Martha Lee	Sr.,	A	El Monte
Stegner, Eudora V.	S.,	A	Sioux Falls, S. D.
Steinberg, Vera	S.,	A	Los Angeles
St. Johns, Harold	F.,	A	Whittier
Stenzel, Roland	F.,	S	Los Angeles
Sterr, Lydia Izetta	Sr.,	A	Los Angeles
Stever, M. Belle	U.,	A	Los Angeles
Stewart, Hugh	F.,	S	Escondido
Stewart, Katherine S.	S.,	A	Long Beach
Stilwell, Katharine H.	S.,	A	Los Angeles
Stone, Helen Marguerite	F.,	A	Gardena
Storey, Joseph Clement	F.,	A	Los Angeles
Suits, Margaret Mary	F.,	A	Santa Monica
Sullenger, Frances Gertrude	S.,	A	Lindsay
Sullivan, Nellie Blythe	Sr.,	A	Los Angeles
Sunkel, Walter William	F.,	A	Tulare
Sutherland, Lawrence E.	F.,	A	Anaheim
Svenson, Lillian Mathilda	U.,	—	Los Angeles
Swift, Claude Earl	J.,	S	Santa Ana
Taber, Jessie	S.,	A	Los Angeles
Tanquary, Grafton Pettis	J.,	A	Los Angeles
Taylor, Arthur William	Sp.,	—	Los Angeles
Taylor, Julia Abbie	F.,	A	Los Angeles
Tenneson, Rosemary E.	S.,	A	Los Angeles
Teschke, Fred Wm.	J.,	S	Newark, N. J.
Thorne, Elsie May	Sr.,	A	Los Angeles

Thomas, Cecil De Witt	F.,	A	Los Angeles
Thompson, Earle Price	S.,	A	Burbank
Thompson, Edith Rawcliffe	S.,	A	Los Angeles
Thompson, Eloise Bibb	Sp.,	—	Los Angeles
Thompson, William Irwin	J.,	S	Los Angeles
Thomson, Olney Mary	J.,	A	Gardena
Thrush, Lloyd E.	Sp.,	—	Redwood City
Tobias, Hazel Naomi	Sp.,	—	Los Angeles
Toland, Joseph Fair Fax	F.,	A	Los Angeles
Tomlinson, Florence Irene	S.,	A	Los Angeles
Tomlinson, Herbert Morgan	F.,	A	Los Angeles
Toney, Gladys Pauline	Sr.,	A	Los Angeles
Toothaker, Frank Morey	Sr.,	A	Sultana
Torgerson, Ina S.	F.,	A	Pasadena
Torrance, Arthur Frederick	Sr.,	A	Los Angeles
Tretheway, Mary Elizabeth	Sp.,	—	Los Angeles
Trevor, Ernest Albert	S.,	A	Los Angeles
Tribby, Robert Ewing	Sr.,	A	Inglewood
Trotter, Fred B.,	S.,	A	Sandymount, Dublin
Truesdell, Clifford A. Jr.,	F.,	A	Los Angeles
Tsuda, Kazuya	Sp.,	—	Los Angeles
Tsuneishi, Satoru	F.,	A	Monrovia
Tubbs, Frances Edna	U.,	—	Venice
Tucker, Margaret Muriel	Sr.,	A	Los Angeles
Tunnison, Burnell R.	J.,	S	Los Angeles
Turner, Mary Esther	F.,	A	Los Angeles
Tutton, Stanley William	Sp.,	—	Los Angeles
Tyler, Edith	U.,	—	Glendale
Tyrrell, Emily Edna	F.,	A	Pasadena
Unowra, Kojiro	S.,	A	Los Angeles
Upton, Philip	F.,	A	Deming, N. M.
Vales, Gonzalo T.	S.,	S	Los Angeles
Van Aken, Leota Carleton	Sr.,	A	Los Angeles
Van Dyke, Marguerite Jane	F.,	A	Ocean Park
Van Fleet, Harry Darwin	J.,	A	Riverside
Van Fleet, Ruth C.	U.,	—	Los Angeles
Van Wyck, William	J.,	A	Los Angeles
Vawter, Charlotte Baird	F.,	A	Ocean Park
Veverka, M. Madilene	U.,	—	Los Angeles



Viole, Prine Paul	F.,	A	Los Angeles
Vivian, Robert Evans	S.,	A	Los Angeles
Wahrenbrock, Ervin Earl	J.,	A	San Diego
Wales, Geo. F.	F.,	A	Tacoma, Wash.
Walker, Everard Follett	F.,	S	Los Angeles
Walker, Helen Yetta	F.,	A	Los Angeles
Walker, Harrie Lloyd	F.,	A	Ocean Park
Walker, Richard Earl	F.,	A	Los Angeles
Wallace, Helen Harriet	F.,	A	Los Angeles
Waller, Lawrence John	S.,	S	Anaheim
Waltz, Welcome Porter	S.,	A	Westminster
Ward, Cecil Kenneth	F.,	A	Stafford, Kan.
Ward, William G.	F.,	A	Mobile, Ala.
Ware, John Allen	F.,	A	Kingman, Ariz.
Warren, Curtis Elmer	Sr.,	A	Los Angeles
Warren, Eugene Austin	J.,	A	Los Angeles
Warren, Lucile Alice	F.,	A	Pasadena
Waterhouse, Richard Green	S.,	A	Los Angeles
Watkins, Fred A.	Sr.,	A	Los Angeles
Watkins, Warren Moore	F.,	A	Los Angeles
Watson, Grace	Sp.,	—	Los Angeles
Watson, Harold G.	F.,	A	Los Angeles
Watson, Mrs. Minnie T.	U.,	—	Los Angeles
Watson, Nita Ovelia	F.,	A	Los Angeles
Watson, Ruth Lucia	F.,	A	Los Angeles
Watson, Walter Thompson	S.,	A	Los Angeles
Watson, Widney	S.,	A	Los Angeles
Waye, Adah Delana	U.,	—	Los Angeles
Weaver, Esther Pearl	Sp.,	—	Los Angeles
Weaver, Grace Evangeline	J.,	A	Los Angeles
Welch, Claude L.	U.,	—	Los Angeles
Welch, Edgar Grant	U.,	—	Los Angeles
Welch, Esther	F.,	A	Long Beach
Welch, Paul R.	F.,	A	Los Angeles
Wells, Esther Emily	F.,	A	Long Beach
Wellborn, Maida	Sr.,	A	Long Beach
Werner, Erwin Peter	F.,	A	Rialto
Wescott, Virgil	J.,	A	Chicago, Ill.
West, Lucy Kirkwood	U.,	—	Los Angeles



Whalian, Olive B.	S.,	A	Fingal, N. D.
White, Mrs. Merta	U.,	—	Los Angeles
White, W. E.	U.,	—	Los Angeles
Whiting, Lillian Viola	U.,	—	Los Angeles
Whittington, Wayne C.	F.,	A	Los Angeles
Whybark, Nellie Vaughn	S.,	A	Los Angeles
Wickman, Pauline Marie	F.,	A	Los Angeles
Wickersheim, Lyle Wm.	J.,	S	Fullerton
Wiggs, Hazel Helen	U.,	—	Whittier
Wilke, Julian Otto	S.,	A	Pasadena
Wilkes, Mary Bernice	J.,	A	Los Angeles
Wilkinson, Frank Royal	F.,	A	Los Angeles
Wilkinson, Hazel Clare	S.,	A	Los Angeles
Wilkinson, James Ray	F.,	A	Los Angeles
Williams, Velnette Helena	F.,	A	Kansas City, Mo.
Willcox, Vivian Elma	Sr.,	A	Los Angeles
Wilson, Grace Marion	F.,	A	Los Angeles
Wilson, Daisyolah	F.,	A	Los Angeles
Wilson, Lloyd Webster	F.,	S	Glendale
Wilson, Mrs. Mannie	F.,	A	Los Angeles
Wilson, N. R.	U.,	—	Los Angeles
Wilson, Theodore Roland	F.,	A	San Fernando
Wilson, William Coleman	F.,	A	Covina
Winder, Louise	F.,	A	Los Angeles
Winder, William A.	Sr.,	S	Los Angeles
Wininger, Ruth	J.,	A	Los Angeles
Witherell, Grace Miriam	S.,	A	Los Angeles
Witherell, Otto S.	Sp.,	—	Los Angeles
Woehr, Ida Belle	S.,	A	Pasadena
Woehr, Reginald	F.,	S	Los Angeles
Wood, Agnes	Sr.	A	Pasadena
Wood, Alice Margaret	F.,	A	Los Angeles
Wood, Elmer B.	F.,	A	Los Angeles
Wood, Frances Ruth	F.,	A	Riverside
Woodhull, Carolyn Beatrice	S.,	A	Los Angeles
Woodman, Gertrude Jemina	F.,	A	Riverside
Woodruff, Jay A.	U.,	—	Los Angeles
Woods, Harry Cottrell	S.,	A	Los Angeles
Woodworth, Mildred Munro	F.,	A	Los Angeles

Work, Cree Telford	F.,	A	Venice
Work, Florence Esther	J.,	A	Venice
Wright, Mabel Lavinia	Sr.,	A	South Pasadena
Wright, Natalie	F.,	A	Los Angeles
Wrottenberg, Jeanetta	U.,	—	Los Angeles
Wynne, Ina Ruth	J.,	A	Ontario
Wyatt, Jane Dillon	Sr.,	A	Los Angeles
Yashima, Chiuzo	Sr.,	A	Los Angeles
Yerkes, Nancy	F.,	A	Hollywood
Yoakum, Ruby	S.,	A	Los Angeles
Yoakum, Ruth	S.,	A	Los Angeles
Yocum, Stella Frances	Sr.,	A	Long Beach
Yocum, Zella Mae	Sr.,	A	Long Beach
Young, Patrick Jefferson	F.,	A	Fowler
Young, Ralph Blaisdell	Sp.,	—	Los Angeles
Zeiler, Joe	S.,	A	Los Angeles
Zerell, Frances M.	Sr.,	A	Monrovia
Zimmerman, Lertin H.	Sr.,	S	Riverside

## GRADUATE DEPARTMENT

**Note**—The abbreviation "H.S." refers to candidacy for the University Recommendation for the High School Teacher's Certificate; "A.M." to the Master of Arts Degree.

Adams, Lucy Burwell, A.B.	
Southern California, Feb., 1915.....	Mathematics, H.S.
Amermann, Dorr, A.B.	
Denver University, 1905.....	Sociology, A.M.
Anderson, Mary Elaine, A.B.	
Southern California, 1908.....	History, H.S.
Ashcraft, Edwin Perry, A.B.	
Southern California, 1908.....	History, A.M.
Atkins, Louise Eloise, B.L.	
Kansas City University, 1905.....	History, A.M.
Ayers, Arthur Carlton, A.B.	
So. California, 1914.....	Economics and Sociology, H.S., A.M.
Bates, Alice L., A.B.	
Southern California, 1914.....	Economics and Sociology, H.S.
Baugh, Arline, B.L.	
University of California, 1913.....	English, H.S.
Beecher, John, A.B.	
Amherst, 1909.....	Economics and Sociology, A.M.
Behrens, Lottie Vera, B.S.	
University of California, Dec., 1913.....	Mathematics
Benson, George Perry, B.S.	
Southern California, 1914.....	Physics, H.S., M.S.
Best, Lucy F. S., A.B.	
Southern California, Aug., 1914.....	History, B.S.
Betts, Dorothy Ellen, A.B.	
Southern California, Feb., 1915.....	Mathematics, H.S.
Biddulph, Herbert Kemp, B.S.	
Greenville College, 1910.....	Biology, H.S.
Blanchard, Ada Elizabeth, B.L.	
University of California, 1906.....	Latin, H.S.
Bloom, Elizabeth Mercedes, A.B.	
Southern California, Feb., 1915.....	German, H.S.
Bloom, Margaretha Felicita, A.B.	
Southern California, Feb., 1915.....	German, H.S.
Brubaker, Nicholas J., A.B.	
Southern California, Feb., 1915.....	History, H.S.
Bruckman, Clara Lillian, A.B.	
Southern California, 1914.....	History, H.S., A.M.

- Bruckman, Edith Louise, A.B.  
Southern California, 1909.....French, H.S.
- Burke, John Claus, B.S.  
Loyola College, 1912.....Economics and Sociology, H.S.
- Butler, Lora, A.B.  
Univer. of Denver, 1908.....Economics and Sociology, A.M.
- Burnight, Lillian Alice, A.B.  
Southern California, 1913.....English, H.S., A.M.
- Canfield, Della Leila, A.B.  
Southern California, 1914.....Latin, H.S.
- Carter, Jessie Merle, A.B.  
Southern California, 1914.....Education, H.S.
- Case, Alden Buell, A.B.  
Tabor, Iowa, 1878.....Spanish, H.S.
- Chambers, Rofena Belle, A.B.  
Southern California, 1914.....Mathematics, H.S.
- Chan, Caroline, A.B.  
Southern California, Feb., 1915.....English, H.S.
- Clark, Archie B. Clifford, A.B.  
Greenville College, 1914.....History, H.S.
- Clifton, Archie Roy, Ph.B.  
University of Wisconsin, 1908.....Education, A.M.
- Cocks, Edna Agnes, A.B.  
Southern California, 1911.....Biology, A.M.
- Colestock, Mary Alice, A.B.  
Southern California, Feb., 1915.....Economics, H.S.
- Connor, Elizabeth, Ph. B.  
University of Chicago, 1910.....English, H.S.
- Couch, Edward Branson, A.B.  
Southern California, 1914.....Biology, H.S., A.M.
- Cramer, Ida Ruth, A.B.  
Southern California, 1914.....Latin, H.S., A.M.
- Culbertson, George William, A.B.  
Southern California, 1914.....History, H.S.
- Daniell, Margaret Lantz, A.B.  
Occidental College, 1915.....French, A.M., H.S.
- Davis, Dorothy  
Goucher College, 1913.....English, H.S.
- Davis, Ida Elizabeth, A.B.  
So. California, Feb., 1914.....History, Spanish, H.S., A.M.
- Davison, Ida B., A.B.  
Eureka College, Ill., 1902.....History, H.S., A.M.
- Deaver, Charles Leon, A.B.  
Southern California, 1914.....History, H.S., A.M.
- De Haan, Carry A., A.B.  
Grinnell College, 1912.....German, H.S.
- Dodge, John Franklin, B.S.  
University of California, 1912.....Chemistry, H.S., A.M.

- Dupuy, Florence Martha, A.B.  
 Leland Stanford Junior University, 1914.....German, H.S.
- Eccleston, Earle S., A.B.  
 Southern California, 1913.....Chemistry, H.S.
- Ely, Lois Anna, A.B.  
 So. California, 1914.....Economics and Sociology, H.S. A.M.
- Finch, Mildred Ruth, A.B.  
 Southern California, 1914.....Zoology, H.S.
- Fisher, Helen Gertrude, A.B.  
 University of Susquehanna, 1913.....Mathematics, H.S. A.M.
- Foster, Mary Havilah, A.B.  
 Wellesley, 1909.....English, H.S.
- Foote, Stanley Stilwell, A.B.  
 Southern California, 1914.....Zoology, H.S.
- Franklin, Edwin Clay, B.S.  
 Southern California, 1914.....Physics, H.S.
- Gardner, Elizabeth M., A.B.  
 Occidental College, 1912.....French, H.S.
- Gay, Ethelean Tyson, A.B.  
 Southern California, 1914.....English, H.S., A.M.
- Gaylord, Joanna Lauman, A.B.  
 Smith College, 1893.....History, A.M., H.S.
- Giffen, Camille M'liss, B.L.  
 University of California, 1914.....History, H.S.
- Gillpatrick, Anna, A.B.  
 University of Colorado, 1904.....English, H.S.
- Good, Rita Catherine, A.B.  
 Southern California, 1914.....History, H.S.
- Goodwin, Ralph Talbott, A.B.  
 Southern California, Feb., 1915.....Chemistry, H.S.
- Haddock, Guy R., A.B.  
 Southern California, 1914.....Chemistry, H.S.
- Ham, Helen Howard, A.B.  
 Leland Stanford Junior University, 1910.....English, H.S.
- Hampton, Anna Margaret, A.B.  
 Earlham College, 1913.....Mathematics, H.S.
- Hampton, Lorenzo A., A.B.  
 Southern California, 1911.....Chemistry, H.S., A.M.
- Hansen, Lillie Person, A.B.  
 Southern California, 1914.....English, H.S.
- Harris, Ethel Cordelia, A.B.  
 Southern California, 1914.....Mathematics, H.S.
- Hatfield, Clara C., A.B.  
 Southern California, Aug., 1914.....History, H.S.
- Hawkins, Clarice Eudora, A.B.  
 Maryville, Tenn., 1910.....English, H.S.
- Haydock, Earl Henry, A.B.  
 Southern California, 1914.....History, H.S.



- Hayslip, Rebecca Snedeker, A.B.  
Occidental College, 1912.....English, H.S.
- Hersman, Francis Craig, B.S.  
University of Illinois, 1909.....Chemistrty, H.S.
- Hickson, Hazel, A.B.  
Penna. College for Women, 1912.....English, H.S.
- Hicks, Eloise Marietta, A.B.  
Southern California, 1914.....History, H.S., A.M.
- Hill, Stephenia E., A.B.  
Southern California, Feb., 1915.....English, H. S.
- Holland, Sue Warren, A.B.  
Smith College, 1909.....Mathematics, Latin, H. S.
- Hollingsworth, Josephine Bacon, A.B.  
Tulane University, 1910.....Economics and Sociology, A.M.
- Hughes, Eugene Montague, A.B.  
Southern California, 1914.....Chemistry, H.S., A.M.
- Humeston, Harold Bruck, B.S.  
University of Redlands, 1914.....Biology, H.S.
- Hunt, Hazel Chatfield, B.A.  
Occidental College, 1914.....English, H.S.
- Hutchinson, Edila May, A.B.  
Stanford University, 1913.....History, H.S.
- Hyatt, Harry C. B.S.  
Ohio State University, 1911.....Biology, A.M., H.S.
- Innes, Robina Ann, A.B.  
Southern California, 1914.....History, H.S., A.M.
- Jameson, Emma, B.S.  
University of California, 1902.....French, A.M.
- Janes, Errol Prosser, A.B.  
Southern California, 1914...Economics and Sociology, H.S.
- Johnson, Bonnie Clyde, A.B.  
Greenville, 1911.....History, A.M.
- Johnson, Edward E., B.S.  
Carroll College, Wis., 1910.....Chemistry, H.S.
- Johnston, Helen Allegra Ellis, A.B.  
Southern California, 1914.....German, H.S., A.M.
- Jones, Elmer Clifton, A.B.  
Washington State College, 1911.....Mathematics, H.S.
- Jones, Elizabeth T., A.B.  
Southern California, 1912.....Mathematics, H.S.
- Jones, Mary Alice, A.B.  
Kansas State University, 1910.....German, H. S.
- Just, Ernest August, B.S.  
Dakota Wesleyan University, 1912.....Chemistry, A.M.
- Kast, Emma Johanna, A.B.  
Southern California, 1914.....German, Spanish, H.S., A.M.
- Kettler, Anna Marguerete, A.B.  
Southern California, 1914.....German, H.S.

Kingcade, Lily, A.B.	
Southern California, 1914.....	Zoology, H.S.
Kirk, Frances Fay, A.B.	
Southern California, Aug., 1914.....	German, H.S.
Kneeland, Martin Dwelle, A.B.	
University of Wisconsin, 1912.....	French, H.S.
La Porte, William Ralph, A.B.	
Southern California, 1913.....	Philosophy, A.M.
Lamberty, Anna Margaret, A.B.	
University of Washington, 1914.....	Latin, H.S.
Lewis, Roger Gregory, A.B.	
University of North Carolina, 1905.....	English, H.S., A.M.
Lineweaver, Thomas Marlow, A.B.	
University of North Dakota, 1914.	
Wesley College, 1914.....	Philosophy, A.M.
Lucy, Anna Louise, A.B.	
Elmira College, 1913.....	French, H.S.
McAdow, Ida Belle, A.B.	
University of Wisconsin, 1911.....	English, A.M.
McClung, Katherine Wilma, A.B.	
Occidental College, Feb., 1914.....	History, H.S.
McCorkle, Julia Norton, A.B.	
Southern California, 1914.....	English, H.S.
McCully, Florence Marie, B.S.	
Columbia University, 1913.....	English, H.S.
McEuen, Fred L., A.B.	
Southern California, Feb., 1915.....	Mathematics, H.S.
McDonald, George James, A.B.	
Southern California, Feb., 1915.....	Education, H.S.
McKelvey, Elizabeth Hamilton, A.B.	
Occidental College, 1913.....	H.S.
Mackey, Mrs. Maryette Goodwin, A.B.	
Wellesley College, 1888.....	English
Marti, Oscar Albert, B.S.	
College of Philomath, Ore., 1905.....	History, A.M.
Martin, Winifred Grace, A.B.	
Lake Forest College, 1907.....	History, H.S.
Mattoon, Everett Warren A.B.	
Southern California 1914.....	Economics, Sociology, H.S.
Marvin, Cloyd Heck, A.B.	
Southern California, Feb., 1915.....	Philosophy, A.M., H.S.
Mealey, Roy Everett, A.B.	
Southern California, 1909.....	History, H.S.
Mentzer, Marian Amanda, A.B.	
Southern California, Feb., 1915.....	Latin, H.S.
Montgomery, G. Millage, B.S.	
Oregon Agricultural College, 1913.....	Botany, H.S.

- Moore, Horace Wood, A.B.  
Baker University, 1913.....Mathematics, H.S.
- Munroe, David B., B.S.  
Southern California, 1914.....Physics, H.S., A.M.
- Myrick, Stephen Stanton, B.L.  
Earlham College, 1894.....History, A.M.
- Nakamura, Kansuke, A.B.  
Waseda University, 1901.....Philosophy, A.M.
- Nash, Mary Vera, A.M.  
Glasgow University, 1914.....German, A.M.
- Netz, Joseph, A.B.  
Southern California, Feb., 1915..Economics, Sociology, H.S.
- Newcomb, Rexford, B.S.  
Univeristy of Illinois, 1911.....App. Mathematics, A.M.
- Nielsen, Esther Marie, A.B.  
Pomona College, 1914.....French, H.S.
- Northrop, Margaret Luella, A.B.  
Southern California, Feb., 1915.....Zoology, H. S.
- Oakes, Mervin Elijah, A.B.  
Southern California, Feb., 1915.....Zoology
- Oakley, Elizabeth M., A.B.  
Southern California, 1912.....History, A.M.
- Oerter, Eunice, A.B.  
Southern California, Feb., 1915.....German, A.M., H.S.
- Palmer, Antoinette, Ph.B.  
University of Chicago, 1911.....Education
- Palmer, Ethel Martha, A.B.  
Southern California, 1914.....Zoology, H.S.
- Palmer, Pearle Margueritte, A.B.  
Macalester College, 1912.....Latin, H.S.
- Peak, William Lionel, A.B.  
Louisiana State University, 1913.....English, H.S.
- Perry, Sue Hammill, A.B.  
Southern California, Feb., 1915.....German, H.S.
- Pesqueira, Claudina Grace, A.B.  
Southern California, 1914.....Spanish, H.S.
- Pettit, Anna Almeda, A.B.  
Occidental College, 1914.....English, H.S.
- Pierce, Juliet Rich, A.B.  
Southern California, Feb., 1915.....English, H.S.
- Plummer, Marion Retta, A.B.  
Whittier College, 1914.....English, H.S.
- Poggi, Mary Josephine, A.B.  
Southern California, 1914.....Education, H.S.
- Prince, Ruby Cone, A.B.  
Southern California, 1912.....History, H.S.
- Pritchartt, Sallie B., A.B.  
Southern California, Feb., 1915.....English, H.S.

- Rapp, Beryl, A.B.  
Southern California, Aug., 1914.....Zoology, H.S., A.M.
- Rathjen, Edwin Frederick, A.M., Ph.D.  
Univer. of Wisconsin, 1905; Cornell Univ., 1906, 1910..Chem.
- Reaves, Bessie Franklin, A.B.  
Southern California, Feb., 1915.....Education, A.M., H.S.
- Rice, Nettie Belle, A.B., A.M.  
Southern California, 1911-1913.....English
- Richards, Ethel Estelle, A.B.  
Southern California, Feb., 1915.....History, H.S.
- Ritter, Harvey Royer, A.B.  
Southern California, Feb., 1915..Economics, Sociology, H.S.
- Rogers, Josephine, A.B.  
Univ. of Colorado, 1908.....Economics and Sociology, A.M.
- Saleen, Herman Erhard, A.B.  
Bethany College, Kas., 1913.....Chemistry, H.S., A.M.
- Sartori, Rosemary, B.A.  
State University of Iowa, 1911.....English, H.S.
- Sasso, Mauro  
Istituto Tecnico, Bari, 1912.....Mathematics, H.S.
- Schmidt, Gerhard Edward, A.B.  
Pomona College, 1913.....German, H.S.
- Sesma, Ramona, A.B.  
Southern California, 1914.....Spanish, H.S.
- Smith, Eva Mae, A.B.  
Southern California, 1914.....Special
- Snyder, Helen, A.B.  
Southern California, Feb., 1915.....German, H.S.
- Snyder, Edward Charles, A.B.  
Southern California, 1914.....Mathematics
- Spayeth, Newell Daniel, B.S.  
University of Redlands, 1914.....History, H.S.
- Stephenson, Clara Crockett, A.B.  
Southern California, 1914.....English, H.S., A.M.
- Sterr, Lydia Izettie, A.B.  
Southern California, Feb., 1915.....German, H. S.
- Stonier, Harold James, A.B.  
Southern California, 1913.....History, H.S., A.M.
- Tanaka, Hirochi  
Waseda University, 1904.....Economics and Sociology
- Thompson, Roy Towner, A.B.  
Southern California, 1913.....English
- Tilroe, Welcome Agnes, A.B.  
Southern California, June, 1914.....Latin, H.S.
- Tritt, Jessie Amelia, A.B.  
Southern California, 1913.....History, A.M.
- Ulrey, Lucile Bernice, A.B.  
Leland Stanford Junior University. 1914.....English, H.S.

- Van Aken, Lillian C., A.B.  
 University of Minnesota, 1899.....Education, A.M.
- Wallace, James Edwin, B.S.  
 University of California, 1912.....Physics, H.S.
- Walters, Hazel Belle, A.B.  
 University of Washington, 1914.....English, H.S.
- Watkins, Etta Belle  
 Southern California, 1914.....Chemistry, H.S.
- Webster, F. Elizabeth, A.B.  
 Nevada State University, 1902.....H.S.
- Wheeler, Henry Hugh, A.B.  
 Southern California, 1914.....Chemistry, H.S., A.M.
- White, Helen, B.S.  
 Iowa State College, 1913.....H.S.
- Whitlock, Maud, B.S.  
 Columbia University, 1903.....English, A.M.
- Wilde, Edith La France, A.B.  
 Wellesley College, 1910.....English, A.M., H.S.
- Williams, Alfred Clenard, A.B.  
 Morehouse College, 1912.....Sociology, A.M.
- Yelton, Elmer, A.B.  
 Yale College, 1905.....Economics and Sociology, A.M.
- Yeretzian, Aram Serkis, A.B.  
 Euphrates College, 1898; University of Chicago, Ph.B., 1909,  
 .....Economics and Sociology



**SUMMER SESSION—1914**

Abbott, Fred W.	Brem, T. Robin
Amerman, Dorr (A.B.)	Brodbeck, Mary
Amyes, Herbert Westley	Brown, Arthur
Anderson, Mary E. (A.B.)	Brown, Earl T.
Angier, Carroll Waite	Brown, Louis Westervelt
Anzai, Kiyoharu	Brown, M. J. E. (A.M.)
Ashmore, Grace Isabelle	Brubaker, Nicholas J.
Atkinson, May (B.L.)	Bunnell, Sarah E. (Ph.B.)
Ayers, Arthur Carlton (A.B.)	Burton, Lois R.
Baker, John Rhea (A.B.)	Butler, Josephine
Barker, Charles A., Jr.	Butler, Lora (A.B.)
Beck, Joseph Ross	Cain, Grace Sylvia
Beckett, Florence Arminda	Calvert, Myrtle May
Beecher, John (A.B.)	Cameron, Una Beatrice
Benefiel, G. J.	Campanari, Leandro (Mrs.)
Benson, Christine M.	Campanari, Louise Charlotte
Berglund, Julia	Carkeek, Charles Burton
Best, Lucy F. S. (Mrs.)	Carlisle, Fred B.
Betts, Dorothy Ellen	Carlisle, M. D. M. (Mrs.)
Biddulph, Herbert K. (B.S.)	Carr, Eunice Leona
Biehl, Rosa	Chamberlain, Iris Clark
Blank, J. P.	Chapman, Arthur
Bloemers, Ida Marie (Mrs.)	Chapman, L. Sidney
Bloom, Felicitas M.	Cheek, Bertha
Bloom, Mercedes E.	Cheney, Agnes R. (A.B.)
Blount, Effie P. (A.B.)	Clark, Lynn (A.B.)
Blum, Edith	Clifton, Archie Roy (Ph.B.)
Boice, Maud	Cocks, J. C. (Mrs.)
Bonham, Ida A. (B.L.)	Cole, Genevieve Frances
Borchgrevink, Astrid L.	Colestock, Mary Alice
Borge, Nanon Georgeine	Collins, Cornelius B. (A.B.)
Bowen, Mary S.	Compton, H. T. (Mrs.)
Bowen, Wilda Louise	Cookman, Alfred
Bowman, Samuel H.	Cookman, John R. (A.B.)
Boyd, Lillian Cecelia	Coomber, Doris P.
Branner, George Casper	Cosner, Elizabeth

- Couch, Edward B. (A.B.)  
Cowan, Beatrice Mary  
Crabill, Hazel Dell  
Crandal, Jesse Robert  
Cross, Pearl E.  
Crow, Helen (A.B.)  
Davids, Mark  
Davies, Christine A.  
Davis, Eleanor Madeline  
Davis, (Ida) Elizabeth (A.B.)  
Daggs, Jennie May  
Dallman, Lelia Ruth  
Deaver, Charles Leon (A.B.)  
Denny, Charles E. (Ph.B.)  
Develaar, Leora E.  
Dickison, Clarence  
Doughty, Marry Rex (B.S.)  
Draper, Matt Ryan (A.B.)  
Dubin, Jennie  
Dungan, Elmer J.  
Dunham, Inez Dorothy  
Dutton, Grace E. (Mrs.)  
Eaton, L. F. (Mrs.) (A.B.)  
Eaton, Ruth Elizabeth  
Edwards, Vera E. (Mrs.)  
Eisenberg, Kate  
Enfield, Oscar Davenport  
Epley, James Franklin  
Esterbrook, Olivia  
Farish, Muriel  
Fish, George Winthrop  
Fitch, Aura L.  
Forbes, William Boomer  
Fox, Charles James (B.S.)  
Funderburgh, Isaac Vaughn  
Gaines, L. M. (Mrs.) (A.M.)  
Gard, Clennie Neal (B.L.)  
Gates, Fred Herbert  
Gerard, Joseph (A.M.)  
Gillis, Edward  
Gilson, Lewis Edward (A.B.)  
Glockner, Lulu G. (A.B.)  
Grant, Garnet Berke (B.S.)  
Grant, Ruth Gordon  
Greer, Vallie Margaret  
Gregory, Carolyn E.  
Grey, Grace J. (A.B.)  
Griffith, Richard Matthews  
Grosfield, Helen Isabel  
Haddock, Guy R. (A.B.)  
Hall, Sylvester B. (B.S.)  
Hansen, Lillie P. (A.B.)  
Harmon, Pansy E.  
Harper, Earle Raymond  
Hatfield, Clara C.  
Haulot, Leona Mary  
Hawes, Minnie L. (A.B.)  
Hawkins, Jessie Meredith  
Hawley, Helen Margaret  
Hawley, Josephine  
Haworth, Eva Louise  
Headley, Wilbert Oscar  
Henry, Mabel G.  
Hepner, Walter Ray (A.B.)  
Hersman, T. C. (B.S.)  
Hibbard, Elizabeth  
Hickman, Lillie Alice  
Hiett, Myrtle  
Higgins, Elmer  
Higgins, Lena  
Hight, Elizabeth G. (B.L.)  
Hill, Jack C.  
Hill, Stephenia Eleanor  
Hills, Henry Merritt (A.B.)  
Hobbs, Allen Thurman  
Hoferb, Esther Lydia  
Hoff, La Verne  
Holland, Sue Warren (A.B.)

- |                            |                             |
|----------------------------|-----------------------------|
| Holleran, Nora (A.B.)      | Lenvig, Bessie C.           |
| Holt, Cora Minerva         | Leveque, George H. (A.B.)   |
| Horton, Ruth Alma          | Lindsey, Hazel M.           |
| Hoskins, Herbert N. (A.B.) | Little, Ellen Ramona        |
| Hoskins, Levi Lester       | Livingston, M. McW. (A.B.)  |
| Houk, George D.            | Lockwood, Louise Edna       |
| Huet, Esther R.            | Lord, Helen Majella         |
| Hughes, Eugene M. (A.B.)   | Lowe, Meta Ferguson         |
| Humeston, Harold B. (B.S.) | Lucas, H. G.                |
| Ingersoll, Caroline Maude  | Lucey, H. O. (Mrs.) (A.B.)  |
| Irvine, Cecelia Robertson  | Lund, LeValley              |
| Irwin, Mabel J. (A.B.)     | Lynd, Louise B.             |
| Ives, Carolyn              | McAdow, Ida Belle (A.B.)    |
| Jackson, Marie H. (A.B.)   | McCorkle, (Annie) R. (A.B.) |
| Jonas, Felix Jacob         | McCorkle, Julia N. (A.B.)   |
| Jones, Alice Louise        | McCulley, R. (Mrs.)         |
| Jones, Olga Ehlers (Mrs.)  | McDaniel, Jean              |
| Johnson, Edward E. (B.S.)  | McDermott, Geo. A.          |
| Johnson, Elmer H.          | McDonald, G. J.             |
| Jurans, Robert (B.S.)      | McGuire, Mary               |
| Kawamoto, Masasuke         | McKee, Sidney (B.L.)        |
| Kellogg, Kate Criag        | McKay, Isabella J. (A.B.)   |
| Kelly, Julia Mae           | McMillian, Wm. Claud        |
| Kendrick, Agnes            | McMore, Blanche Aileen      |
| Kersey, Cleon              | McNeil, Mary Ellen          |
| Kim, Kwan You              | McNichols, Charles L.       |
| King, S. Edith (B.S.)      | MacDonald, Esther           |
| Kinzie, Titus E. (A.B.)    | Madden, George Hampton      |
| Kirby, Charlotte           | Magnuson, Torsten A. A.B.)  |
| Kirk, Fay                  | Maloney, Gertrude Clara     |
| Kuhnle, Helene Louise      | Martie, Menga Anna          |
| La Due, Jennie Emeline     | Martin, Homer (A.B.)        |
| La Fetra, Geraldine        | Martin, Winifred (A.B.)     |
| Lane, Edith Lucinda        | Marvin, Cloyd Heck          |
| Lantz, Gertie Mary         | Mason, Luella K.            |
| Lawton, John Watkin        | Maupin, J. Gibson           |
| Leavitt, Bessie L. (Mrs.)  | Mentzer, Marion A.          |
| Lee, Ettie                 | Mills, Irene                |
| Leege, Lillie              | Min, Chan H.                |

- Miners, Ernest Albert  
Morgan, Alma Elizabeth  
Morgan, Walter Frederick  
Morris, George S. (A.B.)  
Moses, Donna  
Moses, John Campbell  
Nakamura, Kansuke (A.B.)  
Neeley, Roy Davis  
Neill, Frances Thayer (Mrs.)  
Nelson, Jennette  
Netz, Joseph  
Newcomb, Rexford (B.S.)  
Newman, A. J. (A.M.)  
Newton, Helen N.  
Nichols, Loyd P. (A.B.)  
Norene, Mamie C.  
Northrop, Margaret Luella  
Noyes, Jessamine P.  
Oakes, Mervin E.  
Obear, Katharine  
Ogawa, Kiyozumi  
Ong, Eileen Anna  
Ormsby, Carrie Orient  
Osborne, Grace A. (A.B.)  
Ostrander, Justus Marvin  
Park, Emma Janette (B.S.)  
Parker, Lucile Carolyn  
Parkinson, Nora M. (A.B.)  
Parmalee, Florence (A.B.)  
Percy, Mary Fitzpatrick  
Perry, Altha  
Phelps, Grace Lilian  
Pierce, Juliet Rich  
Pierce, Marie Fitch  
Pinkiert, Gertrude  
Pinnell, Homer F.  
Pope, G. C. (A.B., M.D.)  
Porter, Margaret Annette  
Porter, Roy  
Post, Grace  
Preston, Elizabeth L. M.  
Prince, Harold S.  
Proctor, Sarah Ethyl  
Putnam, Mary Chastine  
Ramsey, W. M.  
Rapp, Beryl  
Rapp, Carrie Keller  
Reaves, Bessie Franklin  
Reinhard, Charles John  
Renaud, Charles Lewis  
Read, Wendell Phillips  
Rieder, Minnie E.  
Richards, Ethel Estella  
Richards, Inez Naoma  
Rineheart, Mary G. (Mrs.)  
Ritter, Harvey R.  
Roberts, Grace L.  
Rogers, Alice Marie  
Rogers, Leroy A.  
Ross, Fred Harmon  
Sadicoﬀ, Minnie E.  
Saleen, Herman E. (A.B.)  
Sanderson, Nels F. (A.B.)  
Sands, Winifred  
Schmitt, Katherine Cecil  
Schoeﬀel, Raymond Louis  
Schoenau, William H., Jr.  
Schoonover, Eugenia E.  
Schultz, Walter W. (M.D.)  
Schwarke, Katherine  
Scoles, Hudspeth Elliot  
Seckler, Elsie  
Secor, Eunice  
\*Semeniuk, Z. G. (Mrs.)  
Servis, Beatrice J.  
Sesma, Ramona (A.B.)  
Shidler, Lois Lillian  
Shumway, C. W.



Skinner, Edwin T. (A.B.)	Tribby, Robert Ewing
Smith, Agnes Cornelia	Tritt, Jessie Amelia (A.B.)
Smith, Bessie Grace	Tucker, Mary F. (A.B.)
Smith, Ethelynne Marie	Tyler, Edith
Smith, H. J.	Van Aken, L. G. (Mrs.) (A.B.)
Smith, L. G. (Miss) (A.B.)	Vandoit, Paul Louise
Smith, Margaret H.	Van Pelt, Mary K.
Snyder, Helen	Vertrees, May (A.B.)
Sokoloff, Lillian	Veverka, M. Madelene
Spaeth, Reuben L. (A.B.)	Vollstedt, Ella L. C.
Spaulding, Clinton H.	Wadsworth, Gladys Fern
Specht, Martha	Walker, Eva Gertrude
Spinner, Mabel M. (A.B.)	Walker, Leon S.
Stark, Leander W.	Waterhouse, William Glenn
Stendel, Dorothy E. (A.B.)	Watson, Grace
Stephenson, Florence M.	Weaver, Cyrus E.
Sterr, Lydia Izetta	Weaver, Grace E.
Stewart, Amabel H. (Mrs.)	Wells, Hope (B.S.)
Stieglitz, Marsteller W. B.	Wells, Lloyd W.
Suess, Emma E.	Werner, Erwin Peter
Sullivan, Nellie	Wettlin, M. St. Clair (A.B.)
Talbott, William Thompson	White, Helen
Tanquary, G. P.	White, Ida Willena
Taylor, Hally N. (Mrs.)	White, W. E.
Tenneson, Hanna Catherine	Williams, Cecile Elaine
Terrell, Lena Moss	Williamson, E. M. (A.B.)
Theim, Maning S.	Williamson, Lillian A.
Thomas, Eva	Wilson, Russell T. (B.S.)
Thomas, Walter Wilson	Wood, Bernice
Thompson, Carrie	Woodworth, M. H. (B.Ped.)
Thornton, Alice Haines	Workman, Thomas Edgar
Tinker, Clerra Pearl	Yertzian, A. S.
Torgerson, Ina S.	Yocum, Frank Willis (B.S.)
Treat, Mila Hakes	Zerell, Frances Madeline
Trevor, Ernest A.	



## UNIVERSITY HIGH SCHOOL

Adams, Willard Mallalien	Johnston, Wendella Valeria
Appel, Horace, Jr.	Johns, Irene
Baker, Lawrence Todd	Kato, Shigejiro
Ball, Louis	Kenny, Robert Walker
Barnett, Helen Frances	Kinsman, Julia Frances G.
Beall, Richard Whitney	Krebs, William
Blenkiron, Paul McKinley	Lammerson, Clara Eva
Bowen, Wilda Louise	Long, Marian Loomis
Bozarth, Charles Walter	Love, David William
Bozarth, Harold Waters	MacCormack, William R.
Chamberlain, Iris Clark	Martin, Gertruda Ruth
Chick, Oscar Ralph	McDonald, Bert
Cooney, Elzetta Marie	Metcalfe, Tom
Core, Helena	Miners, Ernest Albert
Cunningham, Frank	Mixer, John Eugene
Dean, Charlie Frank	Mukaeda, Katsuma
Devereaux, Ward Henry	Neeley, Roy David
Dickey, Clarence Dudley	Noll, Cecil R.
Dickerson, Lorene Maude	Obear, Winston H.
Dix, Arthur	Ogborn, Gerald Amos
Dole, Eva Edna	Ogborn, Gladys Henrietta
Downey, William Porter	O'Haver, Ruth Elene
Dufur, Gladys Clarissa	Olds, Reginald Birdsall
Geiselhart, Edward James	O'Neil, Mary Phila
Graham, Lyle Calvin	Ostrander, Glen Wilmont
Gray, Russell Merle	Owyang, Jane
Greeley, Paul Orson	Parks, Thomas Edwards
Haberman, Samuel John	Peters, Claude Everett
Haber, Philip	Petitfils, Raymond Merritt
Haight, George Washington	Powers, Ralph Waldo
Hanes, George Leslie	Price, Mary
Hathaway, Helen Frances	Ray, Ethel Alma
Hoffman, Ezra Dow	Reeves, Claude Lamar
Hovey, Byron Price	Rice, Eugene Boardman
Jacobs, Serge	Richter, Charles Francis

Ridout, William Weeks	Thomas, Walter Wilson
Scribner, William Arthur	Thomas, Bertha LaVern
Seavey, Rolla David	Thomas, Virden Le Moyne
Spangler, Avis Beryl Claire	Torrance, Victor John
Speer, Carl Arthur	Traveller, Gilbert Birdsall
Stanton, Elna Celia	Werner, Claes Edwin
Stockton, William Henry	Will, Arthur J.
Tanenbaum, Ned	Wilson, Venus Ellenora
Teeter, Daniel Glen	Wilson, M. Esther
Terry, Paul Dwight	Young, Charles S.

**COLLEGE OF PHYSICIANS AND SURGEONS****Freshmen**

Baron, Peter Paul	Leonard, A. T. (A.B., B.S.)
Biorkman, Claes Gustav A.	Leven, Aaron Samuel
Chapin, Charles Cox (B.L.)	Mundorff, John J. (B.S.)
Cochran, Richard Cocks	Murphy, William Roe (B.S.)
Curl, Robert Latta	Shea, George Clement
Daly, Edward Joseph, Jr.	Smith, Arthur Wells. (A.M.)
Felsenthal, Louis (D.D.S.)	Talbott, William Thompson
Germon, Pierre Joseph	Thompson, Harry Douglas
Grant, Garnet Berke (B.S.)	Tice, Eldon Webb (A.B.)
Harris, Elmer Garrison	Waters, Zura Orthello
Hill, Jack Charles (A.B.)	Webster, Dorothea
Kessler, Ernest E. (A.B.)	

**Sophomores**

Anderson, James Fleming	Hutchison, William Wilson
Andrews, Nina Wilhelmina	Judge, William Donald
Beggs, James Henry	Judy, Arthur Sinclair
Breslin, Frank J. (B.L.)	Kaufman, Morris Philip
Brown, James Templeman	Levin, Harry
Brown, Charles W. (M.D.V.)	Lupton, Earl Lane
Carson, William George	Marsden, Samuel Arthur
Conway, M. W. (A.B., Ph.G.)	Mellman, Clarence
Coodley, Oscar	Moody, Earl Egbert (A.B.)
Cox, Edward Rochford	Morrison, Maude Leontine
Cunnane, Thomas B.	McCoy, Earl Tucker
Ehlers, R. G. M. (M.D.V.)	McClurkin, Arthur Archibald
Fehrensen, Gail	McDonald, Thomas Gregory
Fosdick, Mildred E. (B.L.)	McLaughlin, James Henry
Frank, Frances Pearl	McLean, Florence Evelyn
Gallant, Peter Adolph	Norton, Archie Augus
Greenburg, Minnie Edna	Paulson, Archie Martin
Guidinger, William Emanuel	Pierce, Sterling Newton
Higginbotham, Gordan W.	Ramsey, Robert Ewart
Hoffman, Philip Block	Renfrew, John Beatty
Hubbard, Henry DeWitt	Robinson, Charles A. (A.B.)

Ryan, Clark David  
Rynin, Simon Soloman  
Schwartz, Edward Isador  
Shea, John Russell  
Suski, Peter M.  
Swancott, John  
Swantek, Casemyra  
Swartz, Bret Albert

Swartz, Rex Forest  
Takahashi, Tejii  
Taylor, Frank William H.  
Wallace, Guy (A.B.)  
Wells, Maria C. (Mrs.)  
Whitlow, Leslie Willis  
Wilson, Clair

### **Juniors**

Benson, Carl Bennett  
Chung, Margaret Jessie  
Cleeves, Montague  
Coleman, Stuart Napoleon  
Davis, Harry Herman  
Davis, Philip Du Mond  
Dorn, Norman Francis  
Feldman, Abraham (A.B.)  
Good, John Ross  
Gummess, Carl Chester  
Harris, Gilbert Franklin

Jacobson, Harry Pincus  
Josephs, Louis  
Lund, Le Val  
Mitchell, Harry Bolton  
Monteleone, Joseph (A.B.)  
Nielson, Harold Westring  
Ovsey, Abraham M.  
Saylin, Joseph  
Schaefer, John Hugo  
Scholl, Agnes Julia  
Schwartz, Joseph Leon

### **Seniors**

Carter, Clarence I.  
Chase, Frank Hernon  
Colby, Herbert E. (M.D.)  
Coleman, Barney Ellerton  
Coy, Louis Milton  
Daniel, William Hardy  
Dodge, William Wallace  
Farwell, M. E. W. (Mrs.)  
Felch, Harry Justin  
Foster, Percy A.  
Germann, Albert Carl  
Gough, Albert Sidney  
Hackett, Earl Charles  
Hardie, Wallace Bonton  
Holt, Rufus Andrew, Jr.

Jackson, Louis Harris  
Lowe, Frank Alexander  
Martin, Wallace Perry  
Mulvehill, Walter William  
Nixon, Charles E. (A.B.)  
O'Donnell, Earl William  
Parker, Wilbur Bird  
Raber, William George  
Rood, Vernon Voorhees  
Rosenkranz, Samuel Victor  
Saverien, Arnold Egard  
Saylin, Abraham Joseph  
Smith, Joseph Kent  
Thayer, Lyman Elanson  
Zorb, George Anthony

**THE COLLEGE OF LAW****Freshmen**

Abrams, William	Brown, Linus Westervelt
Africa, Bernabe	Brown, Ralph James
Allured, Scott Taber	Burns, Phil
Ambrose, Thomas Lyford	Burrows, Edwin R.
Anderson, William Vance	Burton, John F.
Andrews, Frank William	Cady, Loris V.
Audet, George Charles	Cameron, Don R.
Avery, Clark Milton	Cane, Harry David
Banta, George	Cannan, Arnold Martin
Barber, Charles Emory	Canvel, David
Barnett, Blaine	Cartzdafner, John Prose
Barton, George Sydney	Castellaw, Files Frank
Bayley, Edgar A.	Cattern, Clarence Acheson
Beach, Earl C.	Chelgrene, Ida Delia Adele
Beirne, William Bryan	Chiatovich, Cecil Lester
Beauchamp, Cecil	Clark, Earl W.
Biedeback, William Fred	Clark John Gee
Blair, George De Lany	Clement, Hall Fernando
Bishop, Thomas Reece	Clendenin, B. S.
Blake, Samuel R.	Clinton, Ralph Welmond
Blalock, Eugene Nel	Cowan, Louis Dale
Blanche, Eugene H.	Cook, Clarence C.
Booth, Claude Edwin	Coyle, Harold H.
Botsford, John William	Crane, Harley
Bradley, Harry Eldon	Crawford, H. P.
Bradner, C. Johnson	Crawford, Leroy W.
Bradshaw, Norman H.	Creighton, Neal
Breslin, George Montgomery	Cronkhite, Charles A.
Brewer, Walter Collins	Crenshaw, Margaret McC.
Brauer, Casimer J.	Cross, William John
Brett, Arthur Thornbury	Cruse, Frank D.
Brett, Irl D.	Curtin, John Thomas
Brouse, Ernest F.	Davidson, Clarence L.



Dau, Alfred J.	Gilleas, Edward Jeffery
DeCourdres, Thomas Greene	Gillett, Lorenzo Rowe
Delarey, Edward H.	Greenbaum, Harold J.
Delph, Adelaide Grace	Guernsey, Louis Gildersleeve
Dickey, Lindsay K.	Haddix, George John
Dillon, Robert Emmett	Hallner, Herbert Samuels
Doheny, Edward L., Jr.	Hamilton, Joe Dimon
Donoghue, Bernard Lester	Hanes, Simeon Fred
Doran, Millie L.	Hanlon, Thomas Patrick
Dorr, Donald G.	Hardesty, Robert F.
Drew, Howard Porter	Harding, Charles Elmer
Duff, Raveloe Elliott	Harris, Charles Lyle
Dunn, John Carridon	Haslett, Elmer Ray
Durant, Harlan Edward	Haun, Fred Adoff
Dyck, Peter R.	Hawley, Ray Lee
Eberhard, Claire Vivian	Heffron, William Isaac
Eckhardt, Ernst Frederick	Henshey, Howard Blair
Ellison, Harry B.	Herron, Mark Leo
Entler, Norman L.	Hertel, Elmer Joseph
Eshleman, Joseph Franklin	Hill, David A.
Esmilla, Sergis Zulaybar	Hill, Fern Weidler
Estes, Clifford S.	Hill, Paul Foster
Faucett, Carl Webb	Holman, William Steele
Felt, Harold Edward	Hopkins, Ward Dean
Fenchel, Edward Jonah	Howe, Horace Leslie
Ferry, Hubert C.	Howe, Paul Taylor
Finlinson, Johathan	Howe, Samuel Whitelaw
Fisher, Eugene Irving	Howell, Frank Thomas
Fisher, Harold E.	Howland, Percy Howard
Fisher, Walter C.	Howlett, Elmer Horace
Fletcher, Alfred	Hughes, Thomas K.
Follette, Channing	Humphries, Louis Kyle
Frankel, Jacob Allan	Hunt, Arthur Richard
Friedman, Alfred	Hutchins, Alfred Tennyson
Gail, Sherman	Hutchison, William Clair
Gaines, Paul	Isensee, Thirza J.
Gardiner, Everett S.	Ivey, Herbert Dee
George, Harry Bushnell	Johnson, Lillian E.
Gillam, John Bruce	Kadletz, Frank Sherman

- Kaufman, Louis  
Keiser, Lloyd E.  
Kendall, Newton Jerome  
Kesler, Claude Watton  
Kiehl, Roy C.  
Kiggins, Harold Stanford  
Kimmel, S. P.  
Koenig, Victor Hubert  
Kloess, Roland A.  
Landry, William Eli  
Latimer, Charles Myron  
Leonard, Allan  
Lacher, Lee James  
Larew, William S.  
Lawlor, Norman  
Leohner, William Edmund  
Letts, Eugene Carlton  
Levings, Nellie W.  
Lewis, Benjamin  
Lilley, Vernon W.  
Linneman, Hisko Meyer  
L'Heureaux, Harry Daniel  
Littell, J. Frank  
Little, Walter James  
Loewenthal, Paul  
Lucas, Herman W.  
Longmoor, Walter Moffatt  
Mack, Walter Richard  
Mahan, Henry W., Jr.  
Mann, W.  
Marks, Theodore  
Marxen, Edward Henry  
Mason, Bruce W.  
May, Carl Louis  
McCarey, Thomas Leo  
McCauley, Fred E.  
McCully, Earl Justin  
McDonald, George  
McGee, Alis Allena  
McGee, Joseph Carlton  
McIver, Paul Georg  
McLemore, John E.  
McNary, Hugh Alin  
Michels, Edward  
Miller, Edwin Woods  
Miller, Ben  
Mitchel, Frank Newforth  
Morici, Philip  
Mullen, Leon Theron  
Mullins, Fla Graves  
Multhauf, Luie G.  
Munger, Frank  
Murray, Ray Albert  
Nye, Clement De Witt  
Olson, Amery E.  
Olson, Emil E.  
Owens, Timon Evans  
Patterson, Carroll Edward  
Paulsen, Robert Crist  
Peckham, E. R.  
Pennock, Edwin H.  
Perkins, Voltaire  
Perluss, Abe  
Perry, Howard M.  
Perry, John Laird  
Pettitt, Clifton Roberte  
Phillips, Jack Lawrence  
Platz, Hugo  
Pleasants, Samuel Augustus  
Poggi, Mary Josephine  
Ponedel, Carl Herman  
Porter, Bruce William  
Potter, Newton E.  
Quigley, Hubert  
Remalia, Von R.  
Rieber, Benjamin H.  
Richmond, Hedley  
Rinck, Edward Conrad

- |                           |                            |
|---------------------------|----------------------------|
| Riley, Harry Burke        | Snyder, Beatrice Carolyn   |
| Rives, Howard             | Southern, Samuel Clayton   |
| Robbins, Joe H.           | Stanton, Adrian Cornell    |
| Robbin, Maurie Samuel     | Stein, Joseph Julian       |
| Robertson, Maud           | Stephens, Robert Grainger  |
| Ronan, Hanorah Kathryn    | Stevenson, F. Josephine    |
| Rosenblum, Joe            | Stone, Jordan Mallory      |
| Roso, E. S.               | Stone, Le Roy Russell      |
| Rucker, Lyle Wilson       | Subith, Fred E.            |
| Runkle, Clarence B.       | Switzer, Lewis             |
| Russell, Jessie A.        | Takemura, Ishiro           |
| Ryerson, Harold Swayne    | Takatsuka, Nazomu          |
| Sadicoff, Harry Gregory   | Tanquary, Grafton P.       |
| Sawyer, Elmer Ellsworth   | Tarr, Carl Vernon          |
| Schaffer, John Godfrey    | Taylor, R. Emmett          |
| Sayre, John Dunlay        | Thomas, Clyde              |
| Scheii, Laurence Bernhoit | Thompson, John Harry       |
| Schoonover, Mary S.       | Thompson, Sewell William   |
| Sellberg, Harold Theodore | Tipton, Cyril Sutton       |
| Semon, Louis              | Tomlinson, Herbert Morgan  |
| Shaw, William Edward      | Tompkins, Walter Lowery    |
| Sheldon, Albert Leverett  | Verge, Arthur C.           |
| Sherwood, Bert Gibson     | Vivian, Robert Evans       |
| Siegel, Sam D.            | Walker, Stanley Boyd       |
| Sigler, Elmer Gay         | Wanen, C. E.               |
| Sigler, Paul Eldred       | Ware, John Allen           |
| Silverberg, Milton Henry  | Werner, Erwin Peter        |
| Silverstone, Myron Wilk   | White, Leonard M.          |
| Silverstone, Seymour      | White, William W.          |
| Smith, Charles Austin     | Wilson, Joseph A.          |
| Smith, Clifton S.         | Woodward, Frank Albert     |
| Smith, Frank MacPherson   | Williams, Herbert Counsell |
| Smith, Fred               | Young, Calvert Linden      |
| Smith, Mary Stanwood      | Young, Gary Garfield       |
| Smith, William Henry      | Ziegler, Herbert August    |

## Juniors

Allen, Lawrence Winfield	Creutz, Gregory M.
Andrews, Claud B.	Danforth, Florence Virginia
Angus, Howard W.	Daze, Leo David
Arakelian, Astor M.	Doolittle, Gordon Rodgers
Arnold, Max Barton	Dubin, Henry Jelling
Barman, Waldeman John	Eaton, Allan March
Basa, Carlos	Edwards, Noel Condiff
Beatson, Kenneth	Enter, Frank Ambrose
Beckman, Ralph	Eveland, Thomas Lyle
Beckwith, Ruth Edna	Faulconer, Oda
Bedall, Neva Shay	Ferrahian, Matthew G.
Bergh, Chauncy A.	Ferris, James Charles
Berger, Morris Edward	Fisher, Arthur Conrad
Berres, Dora	Fisher, Wayne Holmes
Berry, Reni Sylvanus	Frincke, Martin Carl W.
Bishop, George Wells	Fry, Opal Wilford
Blacksill, James	Fuller, Charles Chapman
Brannick, Lawrence	Gallaher, Al. J.
Brinck, Grace Bertha	Garroway, Samuel Milton
Brunner, Fred	Gerich, John Luke
Butrick, LLeuwelyn V.	Gibbs, Leo Vernon
Carter, Samuel Oliver	Gillespie, Forest
Castellaw, Homer Jordan	Glass, Richard Charles
Chelgrene, Marie	Goldsmith, Lance Wm.
Cobb, Lawrence C.	Grady, John W.
Cohen, Benjamin Charles	Graham, Gerald
Coles, Milton Cecil	Granias, Harry D.
Colburn, John Richard	Gray, Lester Marion
Collins, Victor Ford	Grether, Myra Dell
Connor, William Lawrence	Grobe, Edwin Henry
Conrad, Elson G.	Hagen, John Reese, Jr.
Costello, Evelyn J.	Hahn, Samuel S.
Costello, James Patrick	Haskins, John Earl
Coultas, Birdie Barnard	Haynes, John Orepin
Counts, Carroll Milford	Hirsh, Harry
Cox, Hugh Ernest	Holloway, Clayton Edward
Crandall, William M.	Hollywood, Walter Parks

Horowitz, Fred  
 Huber, Frederick Charles  
 Hunter, Graham Burgess  
 Jacobs, Delmar Rogers  
 James, Everett Rockwell  
 Johnson, Earl Edwin  
 Jones, William Luke  
 Jordan, Curtis Calhoun  
 Kaufman, Sylvanus B.  
 Keith, Donald McKee  
 Kellogg, Caroline Rachael  
 Kelly, Walter Poundstone  
 Ketcherside, Hugh V.  
 Klein, Emilie Sophia  
 Kleinman, Chas. A.  
 Laidlaw, William Rae  
 Lavallette, Elie Augustus F.  
 Lenox, Edwin O.  
 Loenholm, Ragnwald H.  
 Longmore, Jutten Allen  
 Malette, George Ansel  
 Maun, Ernest  
 Mansur, Fred  
 Marten, Wesley E.  
 Matusumoto, Torihika  
 Mattoon, Everett Warren  
 McBryde, James Fambrough  
 Miller, Samuel A.  
 Miyasaki, Shoji  
 Modesti, Phinoclade  
 Morton, Harold C.  
 Morton, W. Taylor  
 Murphy, Leo Joseph  
 Nelson, Charles Raymond  
 Newell, Kenneth Cuthbert  
 Orem, Preston D.  
 Orme, Archie Dean  
 Osborne, Henry Zenas, Jr.  
 Packard, John C.

Partridge, Edwin Ellis  
 Patten, Francis Alan  
 Pawson, James Edward  
 Pearson, Frederick Harold  
 Peipers, Paul  
 Peterman, Russell Wallace  
 Phillips, Josephine Dora  
 Pinney, Warren Ben  
 Pinney, Walter Eslie  
 Pope, James Harlam  
 Purcell, Geoffrey Morris  
 Randall, Wilbur Woodruff  
 Randolph, Percilla Lawyer  
 Rebeil, Andrew, Jr.  
 Riemer, John Leopold  
 Rilliet, Charles Eugene  
 Rittenhouse, Charles Joseph  
 Robinson, John G., Jr.  
 Rodden, Edward Jerome  
 Rodriguez, Arnesto Ernesto  
 Roth, Lester William  
 Schell, Walter Otto  
 Schoenau, William H., Jr.  
 Searle, Edwin Lorraine  
 Shafer, Leroy Vincent  
 Shapiro, Aaron  
 Shepherd, Howard Franklin  
 Shepherd, John Simeon  
 Sheppard, Ben Thomas  
 Sherer, Arthur Clarence  
 Smith, Arthur Duane  
 Smith, Harry Kellar  
 Smith, Robert Fulton  
 Solomon, Irl Espy  
 Spinks, John Webb  
 Sterry, Philip Clinton  
 Stevenson, Walter Roland  
 Stoddard, Frank Wilcox  
 Sword, James Owen



Thompson, Mark	Wheat, Watson Seldon
Todd, Newton M.	White, Charles Whitfield
Trott, Charles Cecil	Wilder, Edward
Upton, Ford Jewett	Willebrandt, Mabel W.
Vincent, Richard Lionel Bob	Willis, Fred Albert
Walsh, Christy	Willis, Wade
Watkins, Fred Arthur	Wilson, Leonard
Webb, Arthur	Woods, Donovan Whitney
Webb, William Philip	Woodhead, Florence Miriam
Weber, John R.	Woodward, Marcus A.
Weisbrod, Clarence George	Young, Lyndol Lester
Wells, Ida Viola	

**Seniors**

Avery, Kasson	Everhard, Ray Charles
Anderson, William A.	Eddie, Hamis Brown
Baldwin, Louis Ledyard	Elmore, John, Jr.
Baldwin, Victor Lewis	Emery, Laura Johnson
Barrett, Edward Cecil	Emery, Owen C.
Blackburn, Porter Conrad	Emme, Otto Joseph
Blauvelt, Harry Foraker*	Fitts, Buron Rogers
Blodget, Lewis William	Flemming, Clarence Edward
Bohlken, Frederick George	Ford, Albert Hunt
Brown, Joseph Edgar	Freston, Herbert August
Browne, Samuel Harrison	Gallinger, Marie
Bryant, John Scott	Gipson, Oscar Martin
Campbell, Allan Bruce	Gleason, Hallie Earl
Canepa, Louis J.	Goldring, Max
Clanton, Bernie Dean	Griffin, Charles John
Clark, Wayne Lyman	Haskell, Roland Sheriden
Close, Lorenzo Cobb	Heizman, Edwin Herman
Collard, William Hohn	Hibbard, Hudson Packer
Collins, Edmund Richard	Hofer, John K.
Converse, Norris May	Holsinger, Henry Ritz.
Cornell, Clarence William	Hubbard, Carson Bernard
Curtiss, Ralph Gilson	Husar, Leonard G.
Dalton, Trewally G.	Hutchins, Charles Franklin
Di Vecchio, Dionizio L.	Ilano, Mariano Matta

Kelly, William Plyny	Sarakisian, Harry
King, Lester George	Saunders, M. Curtis
Lake, Frederick Warren	Shipman, Benjamin William
Lawrence, James G., Jr.	Silliman, Guy Stuart
Hill, Paul Clifford	Silverstein, Leo Victor
Kessler, Albert	Skinner, Tristrem L.
Lester, Will I.	Skirvin, Emmett E.
Marbut, Edgar Hume	Smith, Benson L.
McLaughlin, Robert D.	Smith, Frederick Walter
Meyers, Harry L.	Smith, Wilbur Thompson
Miller, Earl Humphrey	Stillwell, Fred Charles
Montgomery, Norris G.	Swanner, Charles Douglas
Moran, Glenn Logan	Thurber, Harry Delemere
Morrison, Edward H.	Tuttle, George Wilson
Morrow, Ray Leslie	Vermille, Leo King
Musick, Charles Elvon	Versteeg, Charles J.
Nance, Ira Hurst	Wallace, Warren Woodson
Nelson, Robert Earl	Watkins, Fred Arthur
Nethaway, Dean Braddock	Watson, George C.
Patterson, Earl Sheldon	White, Harold John
Phillips, Clifford Henry	White, Wells Newkirk
Phillips, Louis Patrick	Willebrandt, A. F.
Phillips, Rose Sarah	Wright, Leonard
Ross, Ernest S.	Wright, Loyd Earl
Rankin, George Frederick	Yip, Henry U.
Rouse, Albert Frank	Zacher, Edwin Frederick

### **Post-Graduates**

Mack, Maethilda Eleanor	Weller, Frank Clarence
Means, George William	Wells, Hugh Neal
Polhill, Herbert George	

### **Women's Department**

Allen, Ruth	Brinck, Grace
Beckwith, Ruth Edna	Chelgrene, Adele
Bedall, Neva Shay	Chelgrene, Marie
Berres, Dora	Costello, Evelyn

Delph, Adelaide Grace	Phillips, Josephine
Danforth, Florence Virginia	Phillips, Rose Sarah
Doran, Mollie L.	Poggi, Mary Josephine
Emery, Laura J.	Randolph, Percilla Lawyer
Faulconer, Oda	Robertson, Maud
Gallinger, Grethen	Ronan, Hanorah Kathryn
Grether, Mira Dell	Russell, Jessie A.
Hill, Fern Weidler	Schoonover, Mary S.
Isensee, Thirza J.	Smith, Mary Stanwood
Johnson, Lillian E.	Snyder, Beatrice Carolyn
Kellogg, Caroline	Stevenson, F. Josephine
Klein, Emelie S.	Traweek, Bertha
Levings, Nellie W.	Wells, Ida Viola
Mack, Eleanor	Willebrandt, Mabel W.
McGee, Alis Alle na	Woodhead, Florence Miriam

#### Summer School, 1914

Allen, Ruth	Crenshaw, Margaret McC.
Arnold, Max Barton	Curtiss, Ralph Gilson
Barber, Charles Emory	Dorr, Donald G.
Bergh, Chauncy A.	Eaton, Allan March
Berger, Morris Edward	Elmore, John, Jr.
Berry, Reni Sylvanus	Emery, Laura Johnson
Best, A. L.	Emme, Otto Joseph
Bishop, George Wells	Faries, D. R.
Blake, E. E.	Ferrahian, Matthew G.
Brannick, Lawrence	Freston, Herbert August
Brouse, Ernest F.	Frincke, Martin Carl
Brown, Joseph Edgar	Gallinger, Grethen Marie
Brunner, Fred	Garroway, Samuel Milton
Butrick, Llewellyn V.	Gibson, J. S.
Calmore, Frank D.	Glass, Richard Charles
Castellaw, H. J.	Goldring, Max
Clark, Wayne Lyman	Grady, John W.
Collard, William H.	Griffin, Charles John
Collins, Edmund Richard	Haddix, George John
Costello, James Patrick	Hahn, Samuel S.

Hirsh, Harry  
 Hofer, John K.  
 Holsinger, Henry Ritz  
 Humphries, Louis Kyle  
 Hunter, Graham Burgess  
 Hunter, Henry Allan  
 Husar, Leonard G.  
 Jones, William Luke  
 Kelly, Walter Poundstone  
 Ketcherside, Hugh V.  
 Klein, Emelie Sophia  
 Kleinman, Chas. A.  
 Laidlaw, William Rae  
 Lake, Frederick Warren  
 Larson, W.  
 Lester, Will I.  
 Levin, Hyman  
 Loenholm, Ragnwald H.  
 Mann, Ernest L.  
 Mansur, Fred  
 McCarey, Thomas Leo  
 McCully, Earl Justin  
 Modesti, Phinoclade  
 Miyasaki, Shoji  
 Morton, W. Taylor  
 Musick, Charles Elvon  
 Nance, Ira Hurst  
 Nethaway, Dean Braddock  
 Newell, Kenneth Cuthbert  
 Oriska, K.  
 Orem, Preston D.  
 Orme, Archie Dean  
 Owens, Timon Evans

Parker, G. A.  
 Partridge, Edwin Ellis  
 Patterson, Earl Sheldon  
 Pearson, Frederick Harold  
 Peipers, Paul  
 Pennock, Edwin H.  
 Perry, John Laird  
 Peterman, Russell Wallace  
 Phillips, Rose Sarah  
 Price, L. E.  
 Radawitz, C. W.  
 Ross, Ernest S.  
 Richmond, Hedley  
 Rodden, Edward Jerome  
 Rodriguez, Arnesto E.  
 Ruggles, L. M.  
 Shepherd, Howard Franklin  
 Smith, Benson L.  
 Stein, Joseph J.  
 Taylor, R. Emmett  
 Thompson, John Harry  
 Thompson, Mark  
 Thompson, P. J.  
 Torp, Caspar Nielsen  
 Trott, Charles Cecil  
 Tuttle, George W.  
 Versteeg, Charles J.  
 Walsh, Christy  
 White, Charles Whitfield  
 White, Wells Newkirk  
 Willebrandt, Mabel W.  
 Willis, Wade  
 Wright, Leonard

## THE COLLEGE OF DENTISTRY

## Freshman Class

Abramson, J. J.	Gay, V. J.
Alexander, R. H.	Gonzalez, A. A.
Armitstead, E.	Gould, G.
Arnold, H.	Greef, C.
Bach, R. A.	Gum, F. W.
Ballard, C.	Hardstein, J.
Beesemyer, N. L.	Hawke, E. J.
Bogart, J. C.	Haycroft, M. S.
Brown, C. H.	Hill, J. F.
Brown, F. N.	Holcomb, H. V.
Brownson, E. M.	Holcomb, P. T.
Buehren, J. C.	Howard, J. M.
Casebeer, C. R.	Karasawa, K.
Chamberlain, P. F.	Koshi, G.
Chatterton, V. W.	Kurata, T. H.
Cole, C.	Kurisaki, H. I.
Connelly, J. T.	Lardner, W.
Cook, A. G.	Larson, R.
Covert, S.	Leavitt, J. G.
Critchlow, R. F.	McIntyre, E.
Davidson, L. O.	Miller, J. C.
Davis, R. O.	Mitchell, H. L.
Davisson, G.	Montgomery, F. C.
Dooner, A. J.	Morris, R. D.
Doron, J. W.	Moseley, C. C.
Dupignac, B. H.	Nielsen, L. P.
Eames, J. E.	Niisato, I.
Ellsperman, G. A.	O'Brien, R. F.
Enomoto, K.	Petersen, H. P.
Feldman, I.	Purviance, S.
Finley, A. L.	Rosenbaum, N.
Fitzhugh, L. M.	Rush, D. D.
Florence, B.	Saito, D.
Foster, F.	Scholz, E.



Schwamm, J. A.  
Schwartz, A.  
Scott, N. H.  
Scruggs, J.  
Shinn, C. E.  
Smith, W. E.  
Snyder, J. W.  
Standefor, H. F.

Stoker, J. O.  
Stone, S. S.  
Straub, H. L.  
Waltemeyer, B.  
Wessell, E. H.  
Whipple, H. A.  
Williams, C. H.  
Woodward, C. M.

### **Junior Class**

Abbott, W. G.  
Alexander, J. C.  
Baker, W. J.  
Brandel, R. M.  
Carter, H.  
Conner, R.  
Cosgrove, J. E.  
David, M. T.  
Davis, E. V.  
Farr, J. F.  
Finley, H. R.  
Fischer, M. M.  
Guth, W. E.  
Heller, L. A.  
Hill, T. L.  
Hooper, T. J.  
Humphreys, K.  
Husted, R. P.  
Jackson, L.  
Kent, A. J.  
Koch, A.  
Larbalestier, E. R. S.  
Liddle, F. W.

Lindsey, J. L.  
Lipking, F. H.  
Lynn, R. W.  
Nagao, C. K.  
Pace, R. J.  
Petty, F. F.  
Richmond, H.  
Ramsaur, E. E.  
Rasmussen, R.  
Sadler, H.  
Sakamoto, D.  
Samuels, M. G.  
Searcy, C. W.  
Spann, S. T.  
Stewart, R.  
Swenson, E. A.  
Syme, S. I.  
Tevrizian, M. M.  
Thomas, G. A.  
Thornburg, E. G.  
Wells, I.  
Westerfield, J. K.  
Young, H. L.

### **Senior Class**

Andrews, R. H.  
Aloojian, G.  
Bell, R. F.

Block, H.  
Branch, F. M.  
Brimelow, H. C.

- |                 |                      |
|-----------------|----------------------|
| Brown, A. S.    | Kimbell, F. I.       |
| Brown, Hugh     | Kleinberg, J.        |
| Brown, V. H.    | Leisure, G. C.       |
| Chisholm, F. R. | Lufkin, A. W.        |
| Chun, K. I.     | McKellar, S. L.      |
| Cobb, L. A.     | MacDonald, C. A.     |
| Cobb, W. B.     | Mitchell, F. L.      |
| Codling, H. G.  | Neveloff, Bessie     |
| Crane, C. W.    | Okuyoshi, I.         |
| Criger, H. F.   | Petersen, R. C.      |
| Dumas, M. O.    | Petty, F. H.         |
| England, D. L.  | Reese, P. S.         |
| Farmer, W. R.   | Rice, G. F.          |
| Fisher, W. L.   | Sarkisian, H. M.     |
| Fuessel, B.     | Schildwachter, L. C. |
| Gibbons, J.     | Shaffer, H. M.       |
| Gossard, G. C.  | Snipes, C. L.        |
| Gray, H. S.     | Sorensen, H. W.      |
| Hammar, C. L.   | Swartz, R.           |
| Hayward, R. W.  | Underhill, E. C.     |
| Hill, G. E.     | Van Winkle, W. D.    |
| Hodges, L. C.   | Young, N.            |

**THE COLLEGE OF THEOLOGY****Junior Class**

Halfman, Peter David	Reynolds, W. Alonzo (A.B.)
Johnson, Verner	Smith, Stephen L.
Louch, Reginald Charles	Trotter, Fred B.
Lucas, Lawrence V.	Van Winkle, John S. (A.B.)
Lineweaver, Thos. M. (A.B.)	

**Middle Class**

Bolton, Arthur	Gabrielson, John
McFarland, Harry B.	Shumway, Chas. W.

**Senior Class**

Benefiel, George J.	Shepard, C. S. (A.B., LL.B.)
Malan, William E. (A.B.)	Unoura, Kojiro
Min, Chan H.	Weir, Mabel McQ. (A.B.)

**Special**

Burge, Albert A.	Smith, W. G.
Davidson, Charles B.	Torrance, Arthur
Hughes, Alfred	Traveller, Gilbert B.
Nelson, Adolph C.	Weiss, Benjamin Sherwin
Shimizu, Nobukichi	

**THE COLLEGE OF PHARMACY****Juniors**

Ager, Zelba	Huxtable, Milton
Allum, Ralph Lloyd	Iinuma, Navi
Baker, Benjamin Byrd	Ingles, Clement
Brady, Alic Johnson	Jones, Lorinda Barry
Brown, Verna Harriet	Killeen, Julia Geneviene
Bundy, Leland Curtiss	Mackey, Joseph Scott
Byrne, M. Ernest	Mastin, Grant H.
Clark, Stanley	McCombs, John William
Clinton, Francis Joseph	MacLeod, Norman James
Collins, Howard William	McFadyen, Dwight Snyder
Cresswill, Herbert William	Moltzen, Emery
Cureton, Horace	Nolan, Edwin James
Edelman, George Martin	Putnam, Freland C.
Eichler, Bertha	Prince, Edward E.
Fernald, Clyde R.	Scribner, William A.
Frankfurt, R. William	Sharp, Joseph S.
Goold, Roy A.	Sims, Robert P.
Gratto, Earl Byron	Spaulding, Clinton H.
Green, Harold Joe	Smith, Carl
Hamblen, Henry J.	Smith, Meryl Denois
Hankammer, Walter August	Stabler, Robert Laird
Hause, Harold Albert	Tanaka, Rhohei
Hartman, Rudolph Roldin	Ward, Cecil K.
Herrmann, Arthur Paul	Watson, Homer K.
Heying, Edward Gerhardt	Wearne, H. C.
Hilton, Bertha	Weaver, Cyrus Edquist
Hively, Edwin Washington	Wills, Leslie L.
Hurd, Benjamin Selander	Yant, W. E.

**Seniors**

Adler, Robert D.	Brace, Glen Wilson
Armour, John Lester	Carney, John Edward
Arnett, Lee Roy	Chan, Spencer E.

Dorwood, Herman Alum	Lilley, Carleton, L.
Ferrando, Joseph A.	Marshall, W. Earl
Geissinger, B. I.	McCalloch, Porter
Goodwin, Ralph Talbott	Price, Paul E.
Hamilton, J. Clair	Rineheart, Geo. Verne
Googooian, Guogos	Schwarck, Harry J.
Herbster, C. A.	Swain, Wallace F.
Herrmann, George V.	Tasjian, Karekin Karl
Hewitt, Archie Ray	Usami, M.
Hickox, Harold E.	Vignian, Paul
Iseri, K.	Vincent, Edgar Clair
Krause, Albert W.	Virden, Rose
Lee, Dan. G.	Young, Ernest James



**THE COLLEGE OF ORATORY****Class**

Brewster, Harold	Jackson, Bernice
Brown, Vesta	Jamgochian, Araxie
Burns, Corinne	Johns, Irene
Carlyon, Lucile	Knecht, Marjorie
Claggett, Fern	Lieberg, Helenita
Crentz, Gregory	McGrew, Bertha
Crowther, Rhea	McFarland, Harry B.
Davies, Henrietta	Mason, Mildred
Dodson, Corin	Mukaeda, Katsuma
Don Carlos, Mrs. Florence	Olds, Margaret
Ewert, Mrs. Mary V.	O'Neil, Mary Phila
Fuller, Faye	Poggi, Ruby A.
Galeener, Amy	Pursell, Della I.
Glenn, Hilda	Sander, Helen
Graves, Rachael	Spaeth, Walter
Gurney, Barbara E.	Stonier, Harold
Haydock, Earl	Thompson, Roy
Henrickson, Althea	Turner, Mrs. Bessie
Hicks, Florence	Wadsworth, Gladys
Hubbard, Virginia	Walker, Marjorie
Hughes, Faye	Welch, Esther
Hummel, Lucy	Williams, Velnette

**Private Instruction**

Ayers, Lucile J.	Davies, Henrietta
Barnes, Jessie B.	Dodson, Corin
Brewster, Harold	Dolley, Lois
Brown, Vesta	Don Carlos, Mrs. Florence
Burns, Corinne	Doolittle, Gordon R.
Carlyon, Lucile	Fitzgerald, Geraldine
Claggett, Fern	Fuller, Faye
Chapman, Arthur	Fullerton, Winifred
Crowther, Rhea	Galeener, Amy

Glenn, Hilda  
Graves, Rachael  
Gurney, Barbara E.  
Haydock, Earl H.  
Henrickson, Althea  
Hicks, Florence  
Horowitz, Fred  
Hubbard, Virginia  
Hughes, Faye  
Hummel, Lucy  
Jackson, Bernice  
Jamgochian, Araxie  
Johns, Irene  
Kalliwoda, Helen  
Knecht, Marjorie  
Langston, Joyce  
Lieberg, Helenita  
McGrew, Bertha  
Mason, Mildred  
Mizener, Ruth  
Mukaeda, Katsuma  
Mullin, Horace

Neill, Mrs. Frances  
Olds, Margaret  
O'Neil, Mary Phila  
Pursell, Della I.  
Renison, Aileen  
Sander, Helen  
Scott, Clara M.  
Spaeth, Walter H.  
Stephenson, Clara C.  
Stonier, Harold  
Thompson, Roy  
Tribby, Ewing  
Van Grove, Terese  
Wadsworth, Gladys  
Waldeck, Alice  
Walker, Marjorie  
Wardwell, Alice L.  
Welch, Esther  
Wells, H. N.  
Williams, Velnette  
Wright, Mabel

## THE COLLEGE OF MUSIC

Abraham, Leslie	Claybaugh, Ada
Adams, Mrs. Ella M.	Claybaugh, Lillian
Adams, Florence	Coate, Reta
Adams, Aleene	Cogswell, Golda
Adkinson, Katherine	Comer, Mildred
Ahlswede, Ruth	Cooney, Marie
Aplswede, Ruth	Cooper, Leslie
Allison, Lora	Cossock, Violet
Altoon, Victoria	Cox, Mrs. J. A.
Amack, Coy	Craig, Lois
Ames, Ruth	Crain, Ernestine
Amos, Lutie	Cross, Vera
Atwater, Margaret	Cummins, Edna
Ayers, Mrs. Lilian	Dahl, Mrs. Ethel
Baker, Mrs. Neola	Dahl, Wesley
Barlow, Mr.	Davis, Ida C.
Bastian, Lucy	Davis, Ilah
Bastian, Winifred	Davis, Robert T.
Bishop, Mrs. Grace	Dean, Edna
Blaunt, Miss	Douglas, Mr.
Bloomberg, Florence	Douthit, Edna
Bokenkrager, Edith	Dye, Dorothy
Bokenkrager, Robert	Dyer, Lois
Bradforde, C. E.	Edwards, Opal
Branton, Mrs. Harry	Eubank, Grace
Brier, Carey	Falkenstein, Stanley
Bronson, Mrs. M.	Filben, Marguerita
Brown, Isadora	Fisher, Maria
Brown, Mabel	Flick, Gertrude
Brown, Mrs. Robert	Ford, Phyllis
Brubaker, Mrs.	Foreman, G. W.
Burton, Lois	Foster, Mrs. Ethelwyn
Cannon, Mildred	Foster, Mrs. E. J.
Carmedad, R. W.	Fowler, Blanche
Carson, Harold Paul	Frackelton, J. R.
Chew, Mrs. Iva S.	Franklin, Mae

Fraser, Archy	Leslie, Eli
Friend, Antonia	Leslie, Mildred
Friend, Estella	Lewis, Reed
Furber, Marian	Lietzau, Emily
Garrison, Dorothy	Listman, May
Gay, Edith	Long, Alfreda
Glidden, W. B.	Lovell, Alta
Gould, Rita	Ludden, Florence
Green, Gilbert	Lynn, Theta
Hand LaVerne	Marks, Inez
Hartfield, Bernice	McKibben, Roy C.
Hauck, Mrs. Marion	McQuinn, Guelph
Henke, Dorothy	Mead, Florence
Henry, Mildred	Miller, Gladys
Herbold, L.	Miller, Marjorie
Hickman, Lillie	Millin, Mrs. Elizabeth
Hersey, Gertrude	Mills, Erma
Hilend, Martha	Mintener, Katie
Holteen, Willard	Mizener, Docotah
Houts, Pauline	Monfort, Mrs. Agnes
Irwin, Florence	Montenyohl, Kathryn
Jackson, Sydney	Moore, Virgie Lee
James, Doris	Morris, W. Earle
Jepson, Florence	Nagel, Kenneth
Jennings, Caroline	Ong, Maurine
Jewel, Mrs. R. P.	Otto, Frank W. Jr.
Jessurun, Jeanette	Palmer, I. N.
Jessurun, Johanna	Parker, Erma
Jimenez, Marie	Peifer, Mrs.
Junge, Margaret	Pellicciotti, Joe
Kern, Faye	Petermann, Vivian
King, Elmer	Petermann, Albert
Kittrell, Fay	Petermann, Donald
Knight, Vida	Peterson, Marion
Kuhnle, Wesley	Peterson, Mildred
Laning, Emma	Phelps, Mrs. W. W.
Lawrence, Harriett	Price, Ellen
Lawrence, Hilda	Proctor, Ethyl
Lennox, Catherine	Rasmussen, Mildred

Rebber, L. L.	Suma, Frank
Rebban, Pearl	Summe, Ethel
Reynolds, Blanche	Sunkel, Walter
Rhodes, Marie	Tanaka, Shio
Ritter, Helen	Tedrick, Charlyn
Rush, Harry	Terry, Aileen
Rush, Virgil	Terry, Harold
Ross, Eunice	Thayer, Orpha
Rudolph, Mabel	Totton, Valaria
Sanger, Mildred	Towne, Blanche
Schlotter, Katherine	Trapp, Mrs. Helen
Schmitt, Katherine Cicel	Tunison, B. R.
Schoeller, Marjorie	Turner, R. E.
Scott, Jessie	Wagner, Frances
Scott, Katherine	Wagner, Rose
Seator, Lucy B.	Waltz, Mrs. Lois
Sellar, Georgena	Ware, John A.
Seward, Mrs. E. D.	Waterhouse, Madeline
Shaff, Miss	Watson, Welcome
Sheridan, Margaret	Weir, McQueen
Sherman, Mrs. Gladys	Welch, Harriett
Simmons, Isabelle	Wellman, Luna
Skeele, Mary	Winder, Louise
Skinner, Miss	Whalian, Olive
Smith, Lucy	White, Margaret
Smith, Rachel	Williams, Georgia
Smith, Sarah	Woodforde, Florence
Stanley, Jane	Woodman, Gertrude
Stegner, Alma	Wright, Corrine
Stephens, Melzena	Zell, Mary
Steward, Katherine	



**THE COLLEGE OF FINE ARTS**

Anders, Hazel	Lambert, Stella
Bombright, Stanton	Landfair, Harold E.
Brubacker, Marcella M.	Langton, Mary
Buckman, Mrs. W. B.	Layne, Jessie
Burns, Daisy M.	Leaver, Marion
Calhoun, Jessie	Linardos, George
Campbell, Earl	Michod, Rose
Carlson, L. W.	Mondon, Evelyn
Castruccio, Romilda	Orban, Vivian
Chan, W. H.	Patterson, Isabelle
Channing, Mrs. Josephine T.	Pelee, Didier
Chapman, L. Sydney	Ramsey, Virginia
Clarke, Marie S.	Rust, Russell
Fouchaux, Madeline	Sargent, Florence
Gilchrist, Meda	Shackford, Mabel
Gross, Matilda L.	Shumaker, Frances
Hada, Katsuki	Simpson, Florence
Hammeraas, Oscar R.	Sprunck, Paul S.
Hanscom, Stella	Steeley, George
Heil, Ruth A.	Tyler, Maybelle
Holden, Mrs. E. V.	Ueama, Tokio
Hutchison, Mrs. Emma	Wakeley, Josephine
Jackson, Horace	Wetherbee, Benjamin
Judson, Helen	Yates, Elsie
Koura, Sketaro	Zander, Lucile
Kazanjian, Karl P.	



# INDEX

- Abdominal Surgery: 238.
- Admission, Requirements of:  
 (Liberal Arts) 40-52;  
 (Graduate Dept., Liberal Arts)  
 59-60;  
 (Summer Session, Liberal Arts)  
 176;  
 (Medicine) 191-197;  
 (Law) 242-243;  
 (Dentistry) 265-266;  
 (Theology) 295;  
 (Pharmacy) 297;  
 (Oratory) 314;  
 (Fine Arts) 323;  
 (High School) 329.
- Admission Subjects: (Liberal Arts)  
 43-52.
- Admission to the Bar: 240.
- Advanced Standing:  
 (Liberal Arts) 41;  
 (Medicine) 195-197;  
 (Law) 243;  
 (Dentistry) 265-266;  
 (Pharmacy) 297;  
 (Fine Arts) 323.
- Advisers (in English Dept.): 98.
- Advertising: 93, 100-101.
- Aesthetics: 89.
- Agriculture: 67.
- Algebra: (Admission) 49-50;  
 (Liberal Arts) 117-118;  
 (High School) 339-340.
- Alumni: (Liberal Arts) 14;  
 (Dentistry) 262.
- Anaesthesia: 275.
- Anatomy: (Liberal Arts) 71-75;  
 (Medicine) 205-207;  
 (Dentistry) 270, 272-273, 279;  
 (Fine Arts) 325.
- Apologetics: 288.
- Architecture: (Liberal Arts) 146-  
 148;  
 (Fine Arts) 324.
- Art and Design: 68-69.
- Art Glass: 326.
- Assaying: 80, 162.
- Astronomy: 119.
- Athletics: See "Physical Educa-  
 tion."
- Attendance, Regulations concerning:  
 (Liberal Arts) 57;  
 (Medicine) 192;  
 (Law) 245-246;  
 (Dentistry) 268;  
 (Pharmacy) 298;  
 (High School) 329.
- Bachelor, Degrees of: See under  
 "Degrees."
- Bacteriology:  
 (Liberal Arts) 72, 159-160;  
 (Medicine) 188-189, 217-218;  
 (Dentistry) 280.
- Banking, Money and: 83.
- Biblical Introduction: 288.  
 See also "English Bible."
- Biology:  
 (Liberal Arts) 69-75, 158-161;  
 (High School) 340.
- Bionomics: 73.
- Botany: (Admission) 51;  
 (Liberal Arts) 74-75, 159;  
 (Pharmacy) 300-301;  
 (High School) 340.
- Buildings and Equipment:  
 (Liberal Arts) 155-163;  
 (Medicine) 184-191;  
 (Law) 241-242;  
 (Dentistry) 263-264, 281;  
 (Pharmacy) 296;  
 (Fine Arts) 322-323.
- Business Regulations:  
 See under "Fees and Expenses."
- Calculus: 118.
- Calendar: 6-7.
- Catalogue of Students, 1914-1915:  
 343-407.
- Certificates: See under "Courses  
 Leading to Degrees, Diplomas  
 and Certificates," and "High  
 School Teacher's Certificate."
- Charities: 86.
- Chemical Engineering: 153-154.
- Chemistry: (Admission) 50;  
 (Liberal Arts) 76-81, 161-162;  
 (Medicine) 187, 209-211;  
 (Dentistry) 278-279;  
 (Pharmacy) 302-304;  
 (High School) 341.
- Church History: 289.
- Civil Engineering: 139-146.
- Civil Government: (Admission) 49.
- Clay Modeling: 69.

- Clinics: (Medicine) 189-191;  
(Dentistry) 261.
- Commercial Law: (Admission) 52.
- Conference Visiting Committees: 14.
- Conditions: (Liberal Arts) 57;  
(Medicine) 197-198.
- Cost of Living: See under "Fees and Expenses."
- Course of Study in Medicine, Regulations Governing: 197-198.
- Courses Leading to Degrees, Diplomas, or Certificates:  
(Liberal Arts) 53-56;  
(Medicine) 203-205;  
(Law) 246-253;  
(Dentistry) 267;  
(Theology) 287;  
(Pharmacy) 296-297, 306-307;  
(Oratory) 312-314;  
(Music) 318-319;  
(Fine Arts) 324-325;  
(High School) 332.
- Criminology: 86.
- Crown and Bridge Work: 277.
- Daily "Southern Californian": 168.
- Debating: 164, 313.
- Degrees:  
Bachelor of Arts, 53-54;  
Bachelor of Arts in connection with Doctor of Medicine, 56, 200;  
Bachelor of Arts in connection with Juris Doctor, 56, 243;  
Bachelor of Divinity, 286;  
Bachelor of Fine Arts, 324;  
Bachelor of Laws, 243;  
Graduate in Pharmacy, 298-299;  
Bachelor of Science, 56;  
Doctor of Dental Surgery, 268;  
Doctor of Medicine, 199-200;  
Master of Arts, 61-63;  
Master of Arts in connection with Doctor of Medicine, 63, 200;  
Master of Laws, 252-253;  
Pharmaceutical Chemist, 299.
- Dental Jurisprudence: 275-276.
- Dentistry, College of: 260-284;  
Faculty List, 31-34;  
Catalogue of Students, 396-398.
- Departments of Instruction:  
(Liberal Arts) 67-154;  
(Medicine) 203-239;  
(Dentistry) 269-281;  
(Theology) 288-293;  
(Pharmacy) 299-309;  
(Oratory) 312-314;  
(Music) 318;  
(Fine Arts) 258-259;  
(High School) 333-342.
- Dermatology: 227.
- Design: 69.
- Diagnosis: 222-224.
- Dietetics and Nutrition: 215-216.
- Diplomas: See under "Courses Leading to Degrees, Diplomas and Certificates."
- Directory: 8.
- Discipline: (Medicine) 198;  
(Law) 246;  
(Dentistry) 266;  
(Pharmacy) 310.
- Doctor, Degrees of: See under "Degrees."
- Drawing: (Admission) 51;  
(Liberal Arts) 68-69, 81-82;  
(Fine Arts) 325;  
(High School) 341;  
See also under "Art and Design," and "College of Fine Arts."
- Ecology: 74.
- Economics and Sociology: 82-88;  
(Admission) 51-52;  
(Theology) 293;  
(High School) 337.
- Education: 88-92.
- Elective Courses: (Liberal Arts) 54.
- Electrical Engineering: 142-153, 156-158.
- Electro-Therapeutics: 227.
- Embryology: 70, 208.
- El Rodeo: 168.
- Engineering, Courses in: 55-56.
- Engineering Courses, Elective in Liberal Arts: 92.
- English Bible: 101-103;  
(Preparatory School) 335.
- English Language and Literature:  
(Admission) 43-46;  
(Liberal Arts) 92-101;  
(High School) 333-335.
- English Final Examinations: 99.
- Entomology: 71.
- Equipment: See under "Buildings and Equipment."
- Ethics: 126.
- Evening Session, College of Law: 250-252.

- Examinations:  
 (Admission) 42;  
 (Liberal Arts) 57-58;  
 (Medical Admission) 192;  
 (Medicine) 197-198;  
 (Law) 246;  
 (Dentistry) 268;  
 (Pharmacy) 298;  
 See also under "Calendar" and  
 "Special Examinations."
- Extraction and Anaesthetics: 275.
- Faculties, The:  
 (Liberal Arts) 16-22;  
 (Medicine) 23-28;  
 (Law) 28-31;  
 (Dentistry) 31-34;  
 (Theology) 34-35;  
 (Pharmacy) 35;  
 (Oratory) 37;  
 (Music) 36;  
 (Fine Arts) 37-38.
- Fees and Expenses:  
 (Liberal Arts) 168-170;  
 (Summer Session) 176;  
 (Medicine) 201;  
 (Law) 258-259;  
 (Dentistry) 282-283;  
 (Theology) 295;  
 (Pharmacy) 309-310;  
 (Oratory) 316;  
 (Music) 320-321;  
 (Fine Arts) 327;  
 (High School) 331.
- Finance: 82.
- Fine Arts, College of: 322-327;  
 Faculty List, 37-38;  
 Catalogue of Students, 407.
- Fraternities: 167, 257.
- French: 103-105;  
 (Admission) 48.
- General College Requirements for  
 A.B.: 55.
- Genito-Urinary Diseases: 234.
- Geography, Physical: (Admission)  
 51.
- Geology: 105-106, 162.
- Geometry: 117-118;  
 (Admission) 50;  
 (High School) 340.
- German: 107-110;  
 (Admission) 47-48;  
 (High School) 336.
- Gifts to the University: 173-174.
- Graduate Council, The: 59.
- Graduate Courses:  
 (Liberal Arts) 61;  
 (Law) 252-253;  
 (Pharmacy) 299.
- Graduate Department of Liberal  
 Arts, The: 58-66;  
 (Catalogue of Students) 369-376.
- Graduation Requirements: See un-  
 der "Degrees" and "Courses  
 Leading to Degrees, Diplomas  
 and Certificates."
- Greek: 110;  
 (Admission) 47;  
 (Theology) 290;  
 (High School) 336.
- Gymnasium: 163-164.
- Gynecology: 238-239.
- Hebrew Language and History: 291.
- High School: 328-342;  
 (Admission) 329;  
 (Catalogue of Students) 382-383.
- High School Teacher's Certificate,  
 The: 63-66.
- Histology: 70-75; 207, 280.
- History: 110-114;  
 (Admission) 49;  
 (High School) 337-338.
- Homiletics: 292.
- Honors on Graduation: 58;  
 See also under "Prizes."
- Hospital Facilities: (Medicine) 189-  
 191.
- Housing: 165-166.
- Hygiene: 72, 131, 219.
- Illustrating: 325.
- Immigration: 85.
- Industrial History: (Admission) 51
- Infirmary, Dental: 281.
- Intercollegiate Oratorical Contests  
 and Debates: 164, 257.
- Interior Decorating: 326.
- International Law: 136.
- Italian: 114-115.
- Jewelry: 326.
- Journalism: 93, 100-101.
- "Junior Standing" Defined: 54.
- Late Afternoon Classes: 66.
- Latin: 115-117;  
 (Admission) 47;  
 (High School) 338-339.
- Laryngology: 235.
- Law, College of: 240-259;  
 Board of Control, 13;  
 Faculty List, 28-31;  
 Catalogue of Students, 386-395.
- Liberal Arts, College of: 39-182;  
 Faculty List, 16-20;  
 Catalogue of Students, 343-381.
- Library Facilities:  
 (Liberal Arts) 155-156;  
 (Medicine) 191;  
 (Law) 242.



## Location, Environment, etc.:

- (The University) 11;
- (Medicine) 183-184, 202;
- (Law) 241;
- (Dentistry) 262;
- (Theology) 294;
- (Music) 317;
- (Fine Arts) 322.

## Logic: 127.

## Marine Algae: 75.

## Marine Biological Station: 73, 160-161;

(Advisory Council) 13.

## Master of Arts, Degree of: 61-63;

(With M.D.) 63, 200.

## Materia Medica:

- (Dentistry) 277-278;
- (Medicine) 220-222;
- (Pharmacy) 302.

## Mathematics: 117-119;

- (Admission) 49-50;
- (High School) 339-340.

## Matriculation: 52-53, 191-194, 266;

See also under "Admission."

## Medical Ethics and Economics: 229-230.

## Medical Jurisprudence: 228.

## Medicine, College of: See under "Physicians and Surgeons, College of."

## Medicine: 224-226.

## Medicine, History of: 228-229.

## Metal Work—Brass and Iron: 326.

## Metaphysics: 127.

## Microscopy: 73, 218, 301.

## Mineralogy: 106.

## Mining Engineering: 153-154.

## Missions and Comparative Religion: 119-121.

## Missions, Foreign: 289.

## Mural Painting: 326.

## Museum, The: 156, 188.

## Music, College of: 317-321;

- Courses Accepted Toward Degree of A.B., 121;
- Faculty List, 36;
- Catalogue of Students, 404-406.

## Neurology and Psychiatry: 226.

## Night School, College of Law: See under "Evening Session."

## Normal Classes: See under "Teacher's Courses," also under "Education."

## Obstetrics: 237.

## Officers of Administration of the University: 15.

## Operative Dentistry: 269-270.

## Operative Technique and Dental Anatomy: 270-271.

## Ophthalmology: 235-236.

## Options in Professional Schools: 56.

## Oral Surgery and Anesthesia: 273

## Oratory, College of: 312-316;

- Faculty List, 37;
- Courses Accepted Toward the Degree of A.B., 121-123;
- In College of Law, 255;
- In College of Theology, 290;
- Catalogue of Students, 402-403.

## Oriental Studies and General Literature: 122-124;

(Theology) 276.

## Orthopedic Surgery: 233.

## Otology: 235.

## Parasitology: 71.

## Pathology: (Medicine) 216-217;

(Dentistry) 274-275, 280.

## Pediatrics: 226.

## Pharmaceutical Jurisprudence: 289.

## Pharmacodynamics: 215.

## Pharmacognosy: 220-222, 302.

## Pharmacy, College of: 296-311;

- Advisory Board, 14;
- Faculty List, 35;
- Catalogue of Students, 400-401.

## Pharmacy: 299-300.

## Philosophy and Psychology: 124-128.

## Physical Education: 129-133, 163-164;

(High School) 342.

## Physical Expression: 315.

## Physiography: 105.

## Physicians and Surgeons, College of:

- 183-191;
- Faculty List, 23-28;
- Catalogue of Students, 384-385.

## Physics: 133-135, 156-158;

- (Admission) 50;
- (High School) 341.

## Physiology: 70;

- (Admission) 51;
- (Medicine) 211-216;
- (Dentistry) 276.

## Physiology, Hygiene and Sanitary Science: 304-305.

## Plant Physiology: 74.

## Political Science: 136.

## Porcelain: 271.

## Pottery: 326.

## Practice Court, The: 255-256.

- Pre-Legal Course: 244-245.  
 Prizes: (Liberal Arts) 172-173;  
     (Medicine) 202;  
     (Law) 258;  
     (Dentistry) 268-269;  
     (Fine Arts) 326;  
     (High School) 330.  
 Proctology: 234.  
 Professional Ethics: 277.  
 Prosthetic Dentistry: 272.  
 Psychology: See "Philosophy and Psychology."  
 Public Speaking: (Law) 255;  
     (Oratory) 313.  
 Publications, Student: See under "Daily Southern Californian," and under "El Rodeo."  
 Radiography: 274.  
 Recitals: (Oratory) 314;  
     (Music) 318.  
 Recommendations for High School Teacher's Certificate, Departmental Requirements: See under Liberal Arts department in question.  
 Registration: See under "Admission," also under "Matriculation."  
 Religious Education: 288.  
 Religious Privileges: 165.  
 Required Subjects: (Liberal Arts) 55;  
     (Civil Engineering) 140-142;  
     (Electrical Engineering) 150-151.  
 Residence Requirements:  
     (Liberal Arts) 58;  
     (Graduate Department of Liberal Arts) 61-62.  
 Rhinology: 235.  
 Sacred Oratory: 290, 313.  
 Sanitary Science: 72.  
 Saturday Classes:  
     (Liberal Arts) 66;  
     (Oratory) 315.  
 Scholarships:  
     (Liberal Arts) 170-172;  
     (Fine Arts) 306.  
 Science: (Admission) 51;  
     (High School) 340-341.  
 Sculpture: 325.  
 Sociology: See under "Economics."  
     (Theology) 243.  
 Soils: 67.  
 Sororities: (Liberal Arts) 167;  
     (Law) 257.  
 Spanish: 136-138;  
     (Admission) 48-49;  
     (High School) 341.  
 Special Course Leading to Certificate of Expression: 314.  
 Special Examinations:  
     (Liberal Arts) 57;  
     (Law) 246.  
 Special Students:  
     (Liberal Arts) 42;  
     (Law) 246;  
     (Dentistry) 266;  
     (Pharmacy) 309;  
     (Fine Arts) 323;  
     (High School) 328.  
 Standard Courses in College of Liberal Arts: 55.  
 Student Organizations and Publications: (Liberal Arts) 167-168;  
     (Law) 256-257;  
     (High School) 330.  
 Summer Sessions: (Calendar) 6;  
     (Liberal Arts) 74, 175-182;  
     (Law) 254;  
     (Fine Arts) 326.  
 Surgery: 231-239.  
 Surveying: 142-143.  
 Systematic Theology: 292.  
 Taxonomy: 74.  
 Teacher's Courses:  
     (Music) 319;  
     (Fine Arts) 325;  
     See also under "High School Teacher's Certificate."  
 Teaching, Practice in: 91.  
 Theology, College of: 285-295;  
     Faculty List, 34-35;  
     Catalogue of Students, 390.  
 Theology, Pastoral: 292.  
 Therapeutics: 220-222.  
 Theses:  
     (A.M.) 62;  
     (B.S. in Civil Engineering) 145;  
     (B.S. in Electrical Engineering) 153;  
     (Phar. B.) 306-307.  
 Trigonometry: 118;  
     (Admission) 50.  
 Trustees, Board of:  
     (University) 12-13;  
     (Dentistry) 260.  
 Tuition: See under "Fees."  
 "Units" defined:  
     (Admission) 40;  
     (Liberal Arts) 53;  
     (Medicine) 192.

## University, The:

Board of Trustees, 12-13;  
Historical, 9;  
Advantages of Location, 11;  
Government and Organization,  
10.

## University High School: 328-342;

Admission, 328-329;  
Courses, 332-342;  
Fees and Expenses, 331;  
Catalogue of Students, 382-383.

## Vocation Subjects: (Admission) 52.

Women's Club: 166-167.

Women's Department: (Law) 253.

Women's Halls: 165-166.

Wood Carving: 326.

Y. M. C. A. and Y. W. C. A.:  
(Liberal Arts) 165;  
(Medicine) 202;  
(Dentistry) 262.

Work for One Semester in Liberal  
Arts Defined: 54-56.

Zoology: 70-72, 158;  
(Admission) 51.







6-751  
S H 1

THE  
UNIVERSITY OF  
SOUTHERN CALIFORNIA  
BULLETIN

VOLUME XI

MARCH 1916

NUMBER 1



YEAR BOOK *for* 1915-1916



UNIVERSITY OF SOUTHERN CALIFORNIA  
YEAR BOOK FOR 1915-1916

[illegible]

# UNIVERSITY OF SOUTHERN CALIFORNIA BULLETIN

VOLUME XI

MARCH 1916

NUMBER 1



## YEAR BOOK *for* 1915-1916 WITH ANNOUNCEMENTS FOR 1916-1917

---

Published Bi-monthly by the University  
Entered as Second Class Matter under Act of Congress, July 16, 1894  
Los Angeles, California

92



University of Southern California Press  
3474 University Avenue  
Los Angeles

## TABLE OF CONTENTS

CALENDAR .....	6
DIRECTORY .....	8
THE UNIVERSITY: HISTORY AND GOVERNMENT .....	9
The Faculties.....	17
THE COLLEGE OF LIBERAL ARTS:	
The Undergraduate Courses.....	41
The Graduate Department.....	60
Departments of Instruction.....	69
Engineering .....	152
General Information.....	169
The Summer Session.....	189
THE COLLEGE OF PHYSICIANS AND SURGEONS:	
General Statement.....	196
Departments of Instruction.....	218
THE COLLEGE OF LAW:	
General Statement.....	255
Departments of Instruction.....	261
THE COLLEGE OF DENTISTRY:	
General Statement.....	279
Departments of Instruction.....	290
THE COLLEGE OF THEOLOGY:	
General Statement.....	314
Departments of Instruction.....	317
THE COLLEGE OF PHARMACY:	
General Statement.....	326
Departments of Instruction.....	328
THE COLLEGE OF ORATORY.....	341
THE COLLEGE OF MUSIC.....	347
THE COLLEGE OF FINE ARTS.....	352
THE UNIVERSITY HIGH SCHOOL.....	358
CATALOGUE OF STUDENTS.....	374
INDEX .....	449

# CALENDAR

1916

## Summer Sessions

June 12	Monday . .	Summer Session begins, Law.
June 19	Monday . .	Summer Session begins, Medicine.
June 29	Thursday .	Summer Session begins, Liberal Arts. Fine Arts.
Aug. 4	Friday . .	Summer Session ends, Liberal Arts.
Aug. 11	Friday . .	Summer Session ends, Law.
Aug. 19	Saturday .	Summer Session ends, Fine Arts.
Sept. 9	Saturday .	Summer Session ends, Medicine.

## Regular Sessions

Aug. 30	Wednesday	} Entrance and Special Examinations and Registration, Medicine.
Aug. 31	Thursday	
Sept. 1	Friday	
Sept. 2	Saturday	
Sept. 5	Tuesday .	Instruction begins, Medicine.
Sept. 11	Monday . .	Instruction begins, Music.
Sept. 11	Monday . .	Entrance and Special Examinations and Registration begin, Arts, Law.
Sept. 14	Thursday .	Instruction begins, Arts, Law, Ora- tory.
Sept. 18	Monday . .	Instruction begins, Fine Arts.
Oct. 5	Thursday .	Registration begins, Dentistry.*
Oct. 2	Monday . .	Registration begins, Pharmacy.
Oct. 4	Wednesday	Dentistry, Opening Assembly, 8 p. m.
Oct. 5	Thursday	Instruction begins, Dentistry, Phar- macy.
Oct. 9	Monday . .	Registration begins, Theology.
Oct. 13	Friday . .	Registration of Students closes for the year, Dentistry.
Nov. 30	Thursday	} The University Thanksgiving Recess.
Dec. 1	Friday	
Dec. 2	Saturday	
Dec. 16	Saturday .	The University Christmas Recess be- gins (1:00 p. m.)

\*Dentistry, examinations for the removal of conditions, October.

1917

Jan. 2	Tuesday	. .	<b>Work resumed after Christmas Recess.</b> Second Trimester begins, Medicine.
Jan. 18	Thursday	. .	Mid-Year Examinations begin, Theology.
Jan. 22	Monday	. .	Second Semester begins, Theology. Mid-year Examinations begin, Fine Arts.
Jan. 23	Tuesday	. .	Mid-Year Examinations and Registration for Second Semester begin, Law.
Jan. 25	Thursday	. .	Mid-Year Examinations begin, Arts, Oratory.
Jan. 29	Monday	. .	Second Semester begins, Fine Arts.
Jan. 30	Tuesday	. .	Registration for Second Semester begins, Arts, Oratory. Second Semester begins, Law.
Feb. 1	Thursday	. .	Second Semester begins, Arts, Oratory.
Feb. 5	Monday	. .	Mid-Year Examinations begin, Pharmacy.
Feb. 8	Thursday	. .	<b>The Day of Prayer for Colleges.</b>
Feb. 22	Thursday	. .	<b>The University Washington's Birthday Recess.</b>
Mar. 5	Monday	. .	Third Trimester begins, Medicine.
Apr. 2	Monday	} . .	Spring Vacation, Liberal Arts, Theology, Pharmacy, Oratory.
Apr. 9	Saturday		
May 14	Monday	. .	Freshman and Junior Examinations begin, Dentistry.
May 14	Monday	. .	Final Examinations begin, Law.
May 21	Monday	. .	Final Examinations begin, Theology.
May 30	Wednesday	. .	<b>The University Memorial Day Recess.</b>
May 31	Thursday	. .	Final Examinations begin. Liberal Arts, Pharmacy, Oratory, Fine Arts.
June 3	Sunday	. .	<b>The University Baccalaureate Sunday.</b>
June 6	Wednesday	. .	Graduating Exercises, University High School.
June 7	Thursday	. .	<b>The University Commencement Day.</b> Alumni Reunions and Banquets.

# DIRECTORY

## THE COLLEGE OF LIBERAL ARTS

Thirty-fifth Street and University Avenue.

## THE COLLEGE OF PHYSICIANS AND SURGEONS

516 East Washington Street.

## THE COLLEGE OF LAW

Tajo Building, First Street and Broadway.

## THE COLLEGE OF DENTISTRY

Sixteenth and Los Angeles Streets.

## THE COLLEGE OF THEOLOGY

Thirty-fifth Place and Hoover Street.

## THE COLLEGE OF PHARMACY

Thirty-fifth Street and University Avenue.

## THE COLLEGE OF MUSIC

Mason Opera House

Branch Office, 35th St. and University Ave.

## THE COLLEGE OF ORATORY

Thirty-fifth Street and University Avenue.

## THE COLLEGE OF FINE ARTS

201 North Avenue 66.

## THE UNIVERSITY HIGH SCHOOL

Thirty-fifth Street and University Avenue.

## THE MARINE BIOLOGICAL STATION

Venice, California.

Information concerning any of the colleges, and yearbooks containing the courses of study, etc., will be mailed upon application to the registrars of the various colleges.



# THE UNIVERSITY

## HISTORICAL

In response to a general feeling that the interests of Christian education demanded the establishment of an institution of higher learning in Southern California, plans were early matured which resulted in the founding, in the City of Los Angeles, of the University of Southern California. On July 29, in the year 1879, the original deed of trust was executed by Ozro W. Childs, Isais W. Hellman, and John G. Downey, donors, to A. M. Hough, J. P. Widney, E. F. Spence, M. M. Bovard, G. D. Compton, and R. M. Widney, as Trustees. On August 8 of the following year, 1880, the incorporation of the University was effected under the title, "The University of Southern California." The name of the corporation has since been changed to "University of Southern California."

The first Board of Directors consisted of eleven persons, namely: A. M. Hough, Charles Shelling, E. F. Spence, P. Y. Cool, S. C. Hubbell, E. S. Chase, P. M. Green, J. G. Downey, R. M. Widney, J. A. Van Anda, and F. S. Woodcock. These, together with the trustees and the original donors of the trust, may be fairly held to represent the founders of the University. The corporation as at present constituted consists of thirty Trustees.

The Articles of Incorporation provide that the Trustees shall be elected by the Southern California Annual Conference of the Methodist Episcopal Church.

The first building was erected on the present campus site in 1880, and on October 4 of the same year the institution was formally opened for the reception of students, and the work of instruction was begun. Men and women are admitted to all departments of the University on the same conditions. Although requiring no particular religious faith of its instructors and students, the institution, in accordance with the fundamental aim of its founders, stands for the effective promotion of Christian culture.

## THE GOVERNMENT OF THE UNIVERSITY

The government of the University is committed to a Board of thirty Trustees. This Board has the power to elect professors and other officers of instruction, to confer degrees, to manage the property of the University Corporation, and to determine the general policy of the institution.

The President has charge of the educational administration of the University and is chairman of the University Council. The principal administrative officers, other than the President, are the Deans, who have immediate charge of the work of the several faculties.

The University Council is a representative body, consisting of the President, and the Dean and the Secretary (or some other member of the faculty) of each of the several colleges. It is the duty of the Council to consider the courses offered by the several colleges with a view to increasing the efficiency and enlarging the range of University work, to encourage original research, to adjust all questions involving more than one of the colleges, and to advise the President upon such matters as he may bring before it.

## ADVANTAGES OF LOCATION

Los Angeles is the metropolis of Southern California. Its population of about 500,000 represents every State in the Union and many foreign lands. Its importance as a political and metropolitan center gives the students of the University unusual opportunities for observation and investigation along many lines, both cultural and professional.

The climate throughout the year is such that tourists from every quarter come to spend a part of the year, and many return to make this their permanent home.

It is the greatest railroad center on the Pacific Coast. Four transcontinental lines are now complete. A network of electric roads connects the city with the numerous beaches, mountain resorts, and outlying towns. These are reached by delightful journeys through orange groves and orchards of the semi-tropical fruits characteristic of the region.

It is known as the Convention City of the West. Every year brings large bodies of people here for the discussion of every kind of public interest known to science, politics, religion, and the humanities. These great conventions afford the student an excellent opportunity to study the subjects of their discussion; and the resident population of the city is sufficiently large to afford important advantages for the study of sociology and kindred subjects.

The diverse viewpoints of the groups of students in the nine colleges make their association an important cultural factor in their lives.

The University campus is in close proximity to Exposition Park, in which more than a million dollars have been recently expended in erecting and equipping buildings and beautifying the grounds. The State Building contains exhibits of the products, mineral and vegetable, of the various counties of the State. The Museum of History, Science and Art contains the valuable collections of The Historical Society of Southern California, The Academy of Sciences, The Cooper Ornithological Society, The Fine Arts League of Los Angeles, and numerous private collections. Because of their easy access, these collections afford special advantages to the students and faculties of the University.

The fifty-five acres of the park athletic grounds are available and afford ample facilities for all outdoor sports.

# OFFICIAL BOARDS

## THE BOARD OF TRUSTEES

### Term Expires in 1916

ALVAH W. ADKINSON, A.M., D.D.....	2129 W. 20th St.
WESLEY W. BECKETT, M.D.....	Pacific Mutual Bldg.
GEORGE FINLEY BOVARD, A.M., D.D., LL.D...	University
WILLIAM M. BOWEN, LL.D.....	Washington Bldg.
HENRY W. BRODBECK, D.D.S.....	Van Nuys Bldg.
JOSEPH E. CARR.....	Los Angeles Investment Bldg.
PRESCOTT F. COGSWELL.....	El Monte, Cal.
B. C. COREY, A.M.....	155 N. Sichel St.
ALFRED INWOOD, D.D.....	1053 W. 36th St.
ALBERT J. WALLACE, LL.D.....	Union Oil Bldg.

### Term Expires in 1917

BISHOP EDWIN HOLT HUGHES, D.D., LL.D.....	San Francisco
GEORGE I. COCHRAN, A.M., LL.D.....	Pacific Mutual Bldg.
WILLIAM F. CRONEMILLER.....	501 Zelda Apts.
JOHN B. GREEN, A.B., D.D.....	501 Exchange Bldg.
EDWARD P. JOHNSON.....	211 Security Bldg.
FRANCES M. LARKIN, Ph.D.....	San Francisco, Cal.
CHARLES EDWARD LOCKE, D.D., LL.D.....	728 Berendo St.
CHARLES A. PARMELEE.....	744 S. Carondelet
A. E. POMEROY, A.M.....	700 Grant Bldg.
FRANK G. H. STEVENS, A.B.....	Pasadena, Cal.

### Term Expires in 1918

JULIUS A. BROWN.....	2277 Hobart Blvd.
GEORGE W. COULTAS, A.B., S.T.B.....	Whittier, Cal.
GEORGE L. HAZZARD, A.M.....	Whittier, Cal.
EZRA A. HEALY, A.M., D.D.....	841 W. 36th Street
GAIL B. JOHNSON.....	Pacific Mutual Bldg.
S. P. MULFORD.....	615 Van Nuys Bldg.
WILLIAM D. STEPHENS.....	1108 W. 27th St.
FRANCIS Q. STORY.....	Alhambra, Cal.
STEPHEN TOWNSEND.....	Long Beach, Cal.
FRANK S. WALLACE.....	Pasadena, Cal.

Note—Where no other city or town is mentioned, the address is understood to be Los Angeles.

### Officers of the Board

Ezra A. Healy.....	President
Stephen Townsend.....	Vice-President
A. E. Pomeroy.....	Secretary
George I. Cochran.....	Treasurer and Financial Agent

### Executive Committee

Ezra A. Healy	Joseph E. Carr
Stephen Townsend	J. B. Green
George I. Cochran	George L. Hazzard
George F. Bovard	Albert J. Wallace
W. M. Bowen	A. E. Pomeroy
Julius A. Brown	W. F. Cronemiller

### BOARD OF CONTROL OF DEPARTMENT OF LAW

George F. Bovard, A.M., D.D., LL.D.....	University
George I. Cochran, A.M., LL.D.....	Pacific Mutual Bldg.
Gavin W. Craig, LL.M.....	Hall of Justice
Thomas W. Robinson, A.M.....	Hall of Records
Frank M. Porter, A.B., LL.M.....	Tajo Bldg.
Hartley Shaw, Ph.B.....	Stimson Bldg.
A. J. Wallace, LL.D.....	Union Oil Bldg.

### ADVISORY COUNCIL, MARINE STATION

George Finley Bovard, A.M., LL.D.....	University
George I. Cochran, A.M., LL.D.....	Pacific Mutual Bldg.
Ezra A. Healy, A.M., D.D.....	841 W. 35th Place
Abbott Kinney.....	Venice, Cal.
Walter Lindley, M.D., LL.D.....	2007 S. Figueroa St.
General M. H. Sherman.....	Hotel Westminster
Arthur B. Benton.....	114 N. Spring St.



**ADVISORY BOARD, COLLEGE OF PHARMACY**

Charles W. Bryson, M.D.....	401 Delta Bldg.
L. N. Brunswig.....	Brunswig Drug Co.
F. W. Braun.....	The Braun Corporation
L. D. Powers, M.D.....	City Hall
W. R. Dickinson.....	Dean Drug Co.
J. J. Freeman.....	10th and Grand Ave.
Frank N. Drake.....	Sun Drug Co.
A. J. Neve.....	Owl Drug Co.

**VISITING COMMITTEE OF THE CONFERENCE**

College of Liberal Arts—J. M. Barnhart, P. P. Carroll, W. W. Cookman.
College of Physicians and Surgeons—C. B. Dalton, W. C. Geyer, D. F. Howe.
College of Law—Daniel Dundas, H. H. Hocker, F. D. Mather.
College of Dentistry—Matt S. Hughes, J. F. Humphrey, E. J. Inwood.
College of Oratory—H. E. Murkett, W. E. Tilroe, L. D. VanArnam.
College of Pharmacy—John Hedley, J. C. Livingston, J. W. Neely.
College of Music—Eli McClish, V. M. McCombs, S. J. McConnell.
College of Theology—A. W. Cummings, A. H. Gunnett, S. J. Rogers.
College of Fine Arts—E. H. Fretz, W. M. Jeffers, C. P. Metcalf.

**OFFICERS OF THE ALUMNI ASSOCIATION**

Ruth Wentworth Brown, A.M.....	President
2659 Romeo Street.	
Ralph Emerson Davis, A.B.....	Vice-President
6088 Selma, Hollywood.	
Maida Willborn, A.B.....	Secretary
411 E. Eighth Street, Long Beach.	
Jesse Ray Miller, A.B.....	Treasurer
3474 University Avenue.	
Hugh Carey Willett, A.M.....	Historian
921 W. Thirty-seventh Place.	

# OFFICERS OF ADMINISTRATION AND INSTRUCTION

## OFFICERS OF ADMINISTRATION

GEORGE FINLEY BOVARD, D.D., LL. D.  
President. On the Gaylord Hartupee Endowment

GEORGE I. COCHRAN, A.M., LL.D.  
Treasurer and Financial Agent

JOHN HAROLD MONTGOMERY, M.S., E.E.,  
Registrar

THOMAS BLANCHARD STOWELL, Ph.D., LL.D.  
Chairman of the Graduate Council

CHARLES WILLIAM BRYSON, A.B., M.D.  
Dean of the College of Physicians and Surgeons

FRANK MONROE PORTER, A.B., LL.M.  
Dean of the College of Law

LEWIS EUGENE FORD, D.D.S.  
Dean of the College of Dentistry

EZRA ANTHONY HEALY, A.M., S.T.D.  
Dean of the College of Theology

LAIRD JOSEPH STABLER, M.S., Ph.C., Sc.D.  
Dean of the College of Pharmacy

WALTER FISHER SKEELE, A.B.  
Dean of the College of Music

WILLIAM LEES JUDSON  
Dean of the College of Fine Arts

BEULAH WRIGHT,  
Dean of the College of Oratory

ALBERT BRENNUS ULREY, A.M.  
Director of the Marine Biological Station

HUGH CAREY WILLETT, A.M.  
Principal of the University High School

ROBERT TYLER SMITH,  
Executive Secretary of the Forward Movement

A. E. POMEROY,  
Secretary Board of Trustees

STANLEY F. McCLUNG,  
Assistant Treasurer

WARREN BRADLEY BOVARD,  
Assistant Financial Agent

CORA DYAR MINEAR,  
Assistant Registrar

CURTIS FERDINAND HUSE,  
Superintendent of Buildings and Grounds

GEORGIANA EMILY QUICK,  
Storekeeper, Department of Chemistry

SARAH ETHYL PROCTOR,  
Assistant in Office of Treasurer

ANNA SHEPARD,  
Secretary to the President

MABEL E. RUSSELL, A.B.  
Assistant in Office of Registrar

CHARLOTTE MAUD BROWN,  
Librarian

MATHILDE OCTAVIE WACK,  
Library Assistant

EDITH BERNICE LOVELAND,  
Library Assistant

RUTH ESTHER BROWNE,  
Library Assistant

ROSCOE L. FRASHER,  
Secretary of the Y. M. C. A.

MERCY WEBSTER BUTTERFIELD,  
Secretary of the Y. W. C. A.

**THE FACULTIES****THE COLLEGE OF LIBERAL ARTS**

- LAIRD JOSEPH STABLER, M.S., Ph.C, Sc.D.....  
.....1120 W. 30th St.  
Professor of Applied Chemistry and Metallurgy.
- MARGARET GRAHAM BORTHWICK, A.B.....  
.....929 W. 35th St.  
Professor of the German Language and Literature.
- ALBERT BRENNUS ULREY, A.M.....1435 W. 23rd St.  
Professor of Biology and Director of the Marine  
Biological Station.
- BEULAH WRIGHT.....344 St. Andrews Place  
Professor of Oratory and Dramatic Art.
- PAUL ARNOLD, Ph.M.....1241 W. 47th St.  
Professor of Mathematics.
- ROY EDWIN SCHULZ, A.B.....Alhambra  
Professor of the Spanish Language.
- FESTUS EDWARD OWEN, A.M.....621 W. 34th St.  
Professor of Philosophy and Psychology.
- JAMES MAIN DIXON, A.M., L.H.D., F.R.S.E.....  
.....427 N. Ardmore Ave.  
Director of Oriental Studies and Professor of Literature.
- KATHERINE TORRANCE FORRESTER.....Pasadena  
Professor of the Spanish Language and Literature.
- TULLY CLEON KNOLES, A.M.....1204 W. 31st St.  
Professor of History.
- EDGAR MAXMILIAN von FINGERLIN, Ph.D.....  
.....Santa Monica  
Professor of the Italian and French Languages and  
Literatures.
- JOHN GODFREY HILL, A.M., S.T.B., Ph.D.....  
.....854 W. 35th Place  
Hazard Professor of the English Bible and Philosophy.

- ROCKWELL DENNIS HUNT, A.M., Ph.D.....  
 .....824 W. 35th Place  
 Professor of Economics.
- ARTHUR WICKES NYE, B.S., M.E.....843 S. Ardmore Ave.  
 Professor of Physics and Electrical Engineering, and  
 Director of the Laboratory.
- CHARLES WALTER LAWRENCE, B.S., C.E.....  
 .....659 N. Alexandria Ave.  
 Professor of Civil Engineering.
- THOMAS BLANCHARD STOWELL, A.M., Ph.D.,  
 LL.D.....2702 Hobart Blvd.  
 Professor of Education.
- GILBERT ELLIS BAILEY, A.M., Ph.D.....927 Figueroa St.  
 Professor of Geology.
- ROY MALCOM, A.M., Ph.D.....457 N. Serrano Ave.  
 Professor of Political Science.
- ALLISON GAW, A.M., Ph.D.....1259 W. 35th St.  
 Professor of the English Language and Literature.
- RUTH WENTWORTH BROWN, A.M.....2659 Romeo St.  
 Professor of the Latin Language and Literature.
- WILLIAM LEES JUDSON.....201 S. Avenue 66  
 Professor of Art and Design.
- EMORY STEPHEN BOGARDUS, A.M., Ph.D.....  
 .....1133 W. 41st St.  
 Professor of Sociology.
- LEROY SAMUEL WEATHERBY, A.M., Ph.D.....  
 .....1299 W. 37th Drive  
 Professor of Chemistry.
- JOHN HAROLD MONTGOMERY, M.S., E.E.....  
 .....1319 W. 37th Place  
 Professor of Physics and Electrical Engineering.
- PAUL SPENCER WOOD, A.B.....1159 W. 37th Drive  
 Professor of the English Language and Literature.
- LAWRENCE MELVILLE RIDDLE, A.M.....  
 .....1270 W. 37th Drive  
 Professor of the French Language and Literature.



- FRANK JOSEPH KLINGBERG, A.M., Ph.D.....  
 .....1443 W. 37th Drive  
 Professor of Modern European History.
- WILLIAM RALPH LAPORTE, A.M.....903 W. 35th Place  
 Professor of Physical Education and Director of  
 Men's Gymnasium.
- BENJAMIN F. STELTER, A.M., Ph.D.....1083 W. 35th St.  
 Professor of the English Language and Literature.
- BRUCE O. BLIVEN, A.B.....1583 W. 45th St.  
 Professor of Journalism.
- ANDREW CREAMOR LIFE, A.M.....1370 W. 36th Place  
 Associate Professor of Botany.
- GERTUDE COMSTOCK, Ph.B.....685 S. Witmer St.  
 Associate Professor of Interpretation.
- HUGH CAREY WILLETT, A.M.....921 W. 37th Place  
 Principal of the University High School and Asso-  
 ciate Professor of Mathematics.
- ELIZABETH YODER.....1313 W. 8th St.  
 Associate Professor of Dramatic Art and Expression.
- HOWARD LESLIE LUNT, A.M.....5300 Pasadena Ave.  
 Associate Professor of Education.
- LESLIE F. GAY, JR., A.M.\*.....2889 Idell St.  
 Associate Professor of History.
- BERTHA JOSEPHINE JACOBY-KIENLE, A.M.....  
 .....1088 W. 31st St.  
 Associate Professor of German.
- CLARENCE WESTGATE COOK, A.B., B.S.....  
 .....5932 Woodlawn Ave.  
 Associate Professor of Civil Engineering.
- SAMUEL RITTENHOUSE, Ph.D.....227 Juliet St.  
 Associate Professor of Zoology.
- MYRTLE EMILY BILES, A.M.....314 E. 32nd St.  
 Associate Professor of German.
- EDNA AGNES COCKS, A.B.....701 W. 36th St.  
 Associate Professor of Physical Education and Direc-  
 tor of the Women's Gymnasium.

---

\*On leave of absence.

- OLIVER JONES MARSTON, A.M.....5382 Budlong Ave.  
Associate in Economics.
- GEORGE F. KENNGOTT, B.D., Ph.D....1016 Gramercy Place  
Associate in Sociology.
- ROBERT J. TAYLOR, A.M.....4166 Normandie Ave.  
Lecturer in Missions and Comparative Religion.
- JEREMIAH B. LILLARD, A.M.....Gardena  
Lecturer in Education.
- HARRY J. McCLEAN, A.B.....Long Beach  
Lecturer in Sociology.
- ARTHUR CLASON WEATHERHEAD, A.B.....  
.....919 W. 35th Place  
Assistant Professor of Art and Design.
- M. PAULINE SCOTT, A.M.....2913 S. Flower St.  
Assistant Professor of English Language and Literature.
- MARIA DE G. E. LOPEZ, A.B.....San Gabriel  
Assistant Professor of the Spanish Language and Literature.
- AUGUST HUND, E.E., Eng.D.....501 W. 28th St.  
Assistant Professor of Electrical Engineering.
- JAY CHESNUTT, A.B.....3974 LaSalle Ave.  
Assistant Professor of English and Public Speaking.
- CARL SUMNER KNOPF, A.M.\*.....New Haven, Conn.  
Assistant Professor of Religious Education.
- EVA MAE SMITH, A.B.....1313 W. 8th St.  
Assistant Professor of Oratory.
- CHESTER HERBERT BOWERS, A.M., M.D.....  
.....1058 Richmond St.  
Medical Examiner of Men.
- ELSA HENRIETTA HORSTMANN, M.D.....  
.....317 Coulter Bldg.  
Medical Examiner of Women and Lecturer on Health and Development.
- DEAN CROMWELL.....1045 South Boyle Ave.  
Director of Competitive Athletics.

---

\*At Yale University, on leave of absence.

- EVA L. de KERPEZDRON.....1025 W. 78th St.  
Instructor in French.
- AVA CLARISSA WELLS.....Santa Ana  
Instructor in Art and Design.
- ELMER HIGGINS.....836 W. 36th St.  
Instructor in Zoology.
- EUGENE MONTAGUE HUGHES, A.B.....Huntington Park  
Instructor in Chemistry.
- ELEANOR ADELAIDE GARDNER.....855 W. 34th St.  
Instructor in Greek.
- IOHANE FSAO SAKAIZAWA.....1134 Georgia St.  
Instructor in the Japanese Language.
- ARTHUR FREDERICK TORRANCE.....841 W. 35th Place  
Instructor in Rhetoric, Oriental Department.
- CLOYD HECK MARVIN, A.B.....1076 W. 35th St.  
Instructor in Economics.
- MARYETTE G. MACKEY.....677 Valencia St.  
Instructor in English.
- WELCOME A. TILROE, A.B.....1017 W. 34th St.  
Instructor in Latin.
- EDWIN F. RATHJEN, A.M., Ph.D.....926 W. 35th St.  
Instructor in Chemistry.
- RALPH T. GOODWIN, A.B.....1125 W. 30th St.  
Instructor in Chemistry.
- JESSE RAY MILLER, A.B.....3474 University Ave.  
Instructor in Journalism.
- HARRY S. SWARTH, B.S.....Exposition Park  
Special Lecturer in Animal Distribution.
- FRANK S. DAGGETT.....Exposition Park  
Special Lecturer in Animal Distribution.
- KENNETH WALLACE, A.B., M.B.A.....2068 Hobart Blvd.  
Special Lecturer in Business Administration.
- JOHN HEDLEY.....Redondo Beach  
Special Lecturer in Chinese History and Civilization.
- FORBES LINDSAY.....6767 Yucca St.  
Special Lecturer in Economics.
- JULIUS ZIEGNER-URIBURU, Dr. Jur. 509 California Bldg.  
Special Lecturer on Spanish-American Literature.

**ASSISTANTS****ART AND DESIGN**

Marion Leaver, Queen Masters, A.B.

**BOTANY**

Dorris Coomber, Dora Ursula Noble, Stanley F. Patton.

**CHEMISTRY**

Claude Earl Swift, Grace Isabelle Ashmore, Leland Lester Rebber, Hugh James Multer.

**CIVIL ENGINEERING**

Herald Luther Briggs, Robert Neer McMaster, Charles William Sprotte.

**HISTORY**

Caroline Maude Ingersoll, Lester E. Cox.

**LIBRARY**

Sarah Fails Brown, Russell Merle Gray, Ida Louise Hanning, Bessie Mildred Hoagland, Leland William Holland, Mazie Janette Hurlbut, Cecilia Robertson Irvine, Wesley Vance Smith, Grafton Pettis Tanquary, Helen Yetta Walker, Ruth Lucia Watson.

**MUSEUM**

Herbert Jones.

**PHYSICAL EDUCATION**

Jessie Marie Grieve, Bernhard Oertley, Ruth Wininger, Grace Miriam Witherell.

**PHYSICS**

Loren Tompkins Clark, Herald Luther Briggs.

**SOCIOLOGY**

Ralph Emerson Davis, A.B., Roscoe Leroy Frasher.

**ZOOLOGY**

E. Robert Burnight, Julian O. Wilkie.

**THE COLLEGE OF PHYSICIANS  
AND SURGEONS**

- CHARLES WILLIAM BRYSON, A.B., M.D.....  
.....808-815 Citizens Bank Bldg.  
Dean of the Department of Medicine, and Professor  
of Gynecology, and Abdominal and Clinical Surgery.
- JAMES HARVEY SEYMOUR, M.D.....502 Brockman Bldg.  
Member of the Judicial Council and Professor of  
Surgery and Clinical Surgery.
- ORVILLE O. WITHERBEE, M.D.....606 Auditorium Bldg.  
Professor of Surgery and Clinical Surgery.
- LYMAN BRUMBAUGH STOOKEY, A.M., Ph.D.....  
.....640 Consolidated Realty Bldg.  
Professor of Experimental Physiology.
- JAMES TUCKER FISHER, M.D.....508 Hollingsworth Bldg.  
Professor of Neurology and Phychiatry.
- THOMPSON B. WRIGHT, A.M., M.D.....  
.....St. Louis Blk., Pasadena, Cal.  
Professor of Medicine.
- FRANCIS OLIVER YOST, M.D.....2831 N. Broadway  
Professor of Pediatrics.
- WILLIAM LEANDER ZUILL, M.D.....  
.....709-717 Wright & Callender Bldg.  
Professor of Otology, Laryngology, and Rhinology.
- THOMAS JEFFERSON McCOY, M.D.....636 Security Bldg.  
Professor of Ophthalmology.
- HARRY OSCAR WHITE, M.D.....516 E. Washington St.  
Professor of Anatomy, Histology, and Embryology.
- CHARLES C. MANGER, Ph.G., M.D.....  
.....1106-7 Marsh-Strong Bldg.  
Professor of Neuropathology, and Clinical Neurology.
- JOHN JOHNSON KYLE, B.S., M.D.....  
.....702 Title Insurance Bldg.  
Professor of Otology, Laryngology, and Rhinology.
- CHARLES H. WHITMAN, M.D.....County Hospital  
Professor of Clinical Surgery.



- FITCH C. E. MATTISON, M.D.....  
 .....326 Chamber of Commerce Bldg., Pasadena, Cal.  
 Professor of Surgery.
- W. W. RICHARDSON, M.D.....611 Lissner Bldg.  
 Professor of Surgery.
- CHARLES C. BROWNING, M.D.....  
 .....601-607 The Merritt Bldg.  
 Professor of Diseases of the Chest.
- F. M. POTTENGER, A.M., M.D., LL.D.....  
 .....1100-1 Title Insurance Bldg.  
 Professor of Diseases of the Chest.
- FREDERICK S. HAMMETT, A.B., M.S., A.M., Ph.D....  
 .....516 E. Washington St.  
 Professor of Physiology, Pharmacodynamics, and  
 Dietetics.
- CHARLES GEORGE MacARTHUR, A.M.....  
 .....516 E. Washington St.  
 Professor of Chemistry, Toxicology, and Hygiene.
- RALPH LEONIDAS BYRNES, B.S., M.S., M.D.....  
 .....516 E. Washington St.  
 Professor of Pathology, Bacteriology, and Clinical  
 Microscopy.
- ALBERT SOILAND, M.D.....916 Wright & Callender Bldg.  
 Professor of Roentgenology.
- FREDERICK A. SPEIK, S.B., M.D.....800 Auditorium Bldg.  
 Professor of Medicine.
- LYLE GILLET McNEILE, M.D....626 Marsh-Strong Bldg.  
 Professor of Obstetrics.

## ASSOCIATE FACULTY

### Associate Professors

- GEORGE JESSE LUND, M.D.....414-417 Auditorium Bldg.  
 Associate Professor of Otology, Laryngology, and  
 Rhinology.
- GEORGE WASHINGTON McCOY, M.D.....  
 .....636 Security Bldg.  
 Associate Professor of Ophthalmology.

- HENRY HERBERT, M.D.....719 Hollingsworth Bldg.  
Associate Professor of Medicine.
- ANSTRUTHER DAVIDSON, C.M., M.B., M.D.....  
.....1018 L. A. Investment Bldg.  
Associate Professor of Dermatology.
- CLARENCE HOLMES CRILEY, Ph.B., M.D.....  
.....404 Auditorium Bldg.  
Associate Professor of Therapeutics.
- EDWARD DOUGLAS JONES, M.D.....208 Con. Realty Bldg.  
Associate Professor of Therapeutics.
- HENRY E. SOUTHWORTH, M.D.....  
.....709-717 Wright & Callender Bldg.  
Associate Professor of Gynecology.
- HENRY DIETRICH, M.D.....917 Brockman Bldg.  
Associate Professor of Pediatrics.
- P. C. H. PAHL, M.D.....518 Consolidated Realty Bldg.  
Associate Professor of Orthopedic Surgery, Frac-  
tures and Dislocations, and Chief of Washington  
Street Clinic.
- WALTER F. WESSELS, M.D.....933 Title Insurance Bldg.  
Associate Professor of Medicine.
- WALTER LESLIE HUGGINS, Ph.B., M.D.....  
.....627 Consolidated Realty Bldg.  
Associate Professor of Surgery.

**Assistant Professors**

- HENRY W. HOWARD, M.D.....800 Auditorium Bldg.  
Assistant Professor of Gynecology.
- ERNEST BRYANT HOAG, A.M., M.D.....705 Fay Bldg.
- JOHN VINCENT BARROW, S.B., M.D.....  
.....1207-8 Baker-Detwiler Bldg.  
Assistant Professor of Medicine.
- T. W. KEMMERER, B.S., M.S., M.D.....516 E. Washington St.  
Assistant Professor of Pathology, Bacteriology, and  
Clinical Microscopy.

**Lecturers**

- PETER C. REMONDINO, M.D.....  
 .....5th and Beech Sts., San Diego, Cal.  
 Lecturer on History of Medicine and Medical Bibliography.
- H. E. MACDONALD, M.D.....314 Hollingsworth Bldg.  
 Lecturer on Life Insurance Examinations.
- GEORGE L. GREER, A.B., LL.B.....1012-14 Hibernian Bldg.  
 Lecturer on Medical Jurisprudence.
- FRANK JAMES LEAVITT, M.D.....159 S. Western Ave.  
 Lecturer on Medicine.
- ANDERS PETERSON, M.D.....County Hospital  
 Lecturer on Genito-Urinary Diseases.
- A. F. MAISCH, M.D.....600 Auditorium Bldg.  
 Lecturer on Medicine.
- W. H. KIGER, M.D.....Consolidated Realty Bldg.  
 Lecturer on Proctology.
- CHARLES EATON PHILLIPS, A.B., M.D.....  
 .....815 Wright & Callender Bldg.  
 Lecturer on Surgery.
- HARLAN SHOEMAKER, A.B., M.D.....  
 .....620-622 Marsh-Strong Bldg.  
 Lecturer on Surgery.
- ARTHUR STANLEY GRANGER, A.B., M.D.....  
 .....705-10 Brockman Bldg.  
 Lecturer on Medicine.
- LEWIS D. REMINGTON, M.D.....Monrovia, Cal.  
 Lecturer on Diseases of the Chest.

**INSTRUCTORS**

- ANDREW P. WILSON, M.D.....900 L. A. Investment Bldg.  
 Instructor in Surgery.
- A. J. SCOTT, JR., M.D.....1015 Story Bldg.  
 Instructor in Pediatrics.
- FRED E. LETTICE, M.D.....1018 Brockman Bldg.  
 Instructor in Surgery.

- EDWARD SWIFT, M.D.....1236 Merchants Nat'l Bank Bldg.  
Instructor in Surgery.
- R. S. CUMMINGS, M.D.....1002 Brockman Bldg.  
Instructor in Medicine.
- MILES GUTHRIE VARIAN, M.D.....  
.....620-22 Marsh-Strong Bldg.  
Instructor in and Demonstrator of Anatomy.
- WILLIAM B. KERN, M.D.....715 Baker-Detwiler Bldg.  
Instructor in Psychiatry.
- DWIGHT S. MOORE, M.D.....1106-7 Marsh-Strong Bldg.  
Instructor in Medicine.
- ROSS ALLEN HARRIS, M.D.....  
.....300-301 Broadway Central Bldg.  
Instructor in Ophthalmology.
- M. J. ROBERTS, M.D.....1229 W. 23rd St.  
Instructor in Diseases of the Chest.
- J. EUGENE FAHY, A.B., M.D.....1151 E. 20th St.  
Instructor in Diseases of the Chest.
- LEON SHULMAN, M.D.....845 S. Hill St.  
Instructor in Diseases of the Chest.
- HERMAN SUGARMAN, M.D.....800 Auditorium Bldg.  
Instructor in Diseases of the Chest.
- ALBERT TUTTON CHARLTON, A.B., M.D.....  
.....502 Brockman Bldg.  
Instructor in Surgery.
- CHESTER HERBERT BOWERS, A.M., M.D.....  
.....3122½ S. Vermont Ave.  
Instructor in Medicine.
- ROBERT M. DUNSMOOR, M.D.....1104-6 Garland Bldg.  
Instructor in Electrotherapy.
- CHARLES F. NELSON, S.B., M.D.....  
.....732 L. A. Investment Bldg.  
Instructor in Surgery.
- RICHARD C. MacCLOSKEY, B.S., M.D.....  
.....926 Marsh-Strong Bldg.  
Instructor in Diseases of the Chest.

- OTTO BAMES, M.D.....4328 S. Central Ave.  
Instructor in Materia Medica.
- ROBERT B. HILL, M.D.....1209 Brockman Bldg.  
Instructor in Medicine.
- ARTHUR F. GODIN, M.D.....800 Auditorium Bldg.  
Instructor in Medicine.
- WILLIAM H. GILBERT, M.D.....  
.....714-725 Baker-Detwiler Bldg.  
Instructor in Surgery.
- L. GARTON AVERY, M.D.....502 Brockman Bldg.  
Instructor in Surgery.
- JOHN A. LARSON A.B. M.S.....516 E. Washington St.  
Instructor in Physiology.
- PHIL BOLLER, A.B., M.D.....717 Hollingsworth Bldg.  
Instructor in Gynecology.
- G. E. PATRIC, M.D.....608 Hollingsworth Bldg.  
Instructor in Diseases of the Chest.
- HARRY M. BRANDEL M.D.....1202 Brockman Bldg.  
Instructor in Therapeutics.
- ADRIAN B. PERKEY, M.D.....917 Brockman Bldg.  
Instructor in Medicine.
- W. B. SMITH, M.D.....L. A. Investment Bldg.  
Instructor in Obstetrics.
- EDGAR M. ALLEN, M.D.....800 Auditorium Bldg.  
Instructor in Obstetrics.
- A. A. BLATHERWICK, M.D.....6100 Moneta Ave.  
Instructor in Obstetrics.
- FRANK CROWELL BISHOP, M.D.....  
.....1106-7 Marsh-Strong Bldg.  
Instructor in Medicine.
- LOUIS M. KANE, A.B., M.D.....5503 Central Ave.  
Instructor in Medicine.
- CLARENCE BARBRE, A.B., B.S., M.S.....  
.....516 E. Washington St.  
Instructor in Physiological Chemistry.



- JOHN MARK LACEY, M.D.....County Hospital  
Instructor in Medicine.
- H. GALLAGHER, M.D.....726 Marsh-Strong Bldg.  
Instructor in Medicine.
- H. LORE RIGGIN, Ph.B., M.D.....  
.....42 N. Raymond Ave., Pasadena, Cal.  
Instructor in Surgery.
- CHAS. S. YOUNG, M.D.....627 Consolidated Realty Bldg.  
Instructor in Surgery.
- F. K. COLLINS, M.D.....508 Hollingsworth Bldg.  
Instructor in Surgery.

#### ASSISTANTS

- LOUIS E. VIKO.....516 E. Washington St.  
Assistant in Pathology.

#### THE COLLEGE OF LAW

- FRANK M. PORTER, A.B., LL.M., Dean.....Tajo Bldg.  
Evidence, Bailments and Carriers, Personal Property  
and Sales.
- GAVIN W. CRAIG, LL.M. (Judge of the Superior  
Court).....Hall of Justice  
Elementary Law, Water Rights and Irrigation Law,  
Securities.
- T. W. ROBINSON, A.M.....County Law Library  
Statutory Interpretation.
- LEWIS A. GROFF.....717 Trust & Savings Bldg.  
Mining Law and History of Jurisprudence.
- CLAIR S. TAPPAAN, LL.B.....815 Black Bldg.  
Contracts (Embracing Quasi Contracts, Partnership,  
Agency, Guaranty and Suretyship), Bills and Notes.
- W. T. CRAIG, Ph.D.....731 Higgins Bldg.  
Bankruptcy.
- JAMES G. SCARBOROUGH, A.B.....1225 Washington Bldg.  
Code Pleading.

- E. W. TUTTLE, LL.B.....921 Huggins Bldg.  
Admiralty and Conflict of Laws.
- SEWARD A. SIMONS, A.B.....812-814 Security Bldg.  
Insurance Law.
- WALTER F. HAAS, ESQ.....302 Coulter Bldg.  
Public Officers.
- BEULAH WRIGHT.....344 St. Andrews Place  
Public Speaking and Debating.
- KEMPER B. CAMPBELL, LL.M.....810 California Bldg.  
Torts, Junior Real Property.
- PERCY V. HAMMON, LL.B.....410 H. W. Hellman Bldg.  
Criminal Law, Criminal Procedure.
- WARREN E. LLOYD, M.L., Ph.D.....906 Central Bldg.  
Philosophy of the Law, Spanish and Mexican Land  
and Mining Law.
- E. W. CAMP, A.B., LL.B.....Santa Fe Railway Office  
Interstate Commerce.
- WILLIAM W. PHELPS.....417 Union Oil Bldg.  
Codification.
- GERTRUDE COMSTOCK, Ph.B.....College of Oratory  
Debating.
- VINCENT MORGAN, LL.B.....502 Exchange Bldg.  
Code Pleading, Domestic Relations, Senior Real  
Property.
- CHAS. C. MONTGOMERY, A.B., LL.B....908 Security Bldg.  
Equity Jurisprudence and Procedure, Federal Juris-  
diction and Procedure.
- CURTIS D. WILBUR (Judge of the Superior Court).....  
.....Court House  
Extraordinary Legal Remedies.
- FREDERICK W. HOUSER (Judge of the Superior  
Court).....Court House  
Private Corporations.
- CARLOS S. HARDY, D.C.L.....519 Trust & Savings Bldg.  
Fraternal Insurance, Medical Jurisprudence.

- ARTHUR P. WILL, LL.M.....Title Insurance Bldg.  
American Diplomacy, Trust and Monopolies.
- MATTISON B. JONES, A.B.....823 H. W. Hellman Bldg.  
Advocacy.
- BYRON C. HANNA, LL.B..1101 Merchants Nat'l Bank Bldg.  
Public Corporation, California Codes.
- JAMES A. GIBSON (Ex-Supreme Court Commissioner  
and Superior Judge).....Merchants Nat'l Bank Bldg.  
Appeals.
- PAUL J. McCORMICK (Judge of the Superior Court)....  
.....Court House  
Criminal Law, Criminal Procedure.
- O. R. W. ROBINSON, LL.B.....International Bank Bldg.  
Acquisition of Title to Public Lands.
- THOS. A. BERKEBILE, LL.M.....512 Higgins Bldg.  
Civil Law, Logic, Comparative Constitutional Law.
- W. S. ALLEN, A.B., B.D.....Title Insurance & Trust Co.  
Conveyancing.
- VICTOR R. McLUCAS, A.B., LL.B.....Security Bldg.  
Common Law Pleading, Wills.
- WILLIAM HAZLETT, LL.B.....601 Trust & Savings Bldg.  
International Law.
- WM. BEHR.....624 S. Spring St.  
Use of Books and Research.
- F. L. A. GRAHAM, LL.B.....1029 Higgins Bldg.  
Patents and Unfair Competition.
- TANNA ALEX, LL.M.....368 S. Lucas Ave.  
History of Criminal Law.
- JAMES S. McKNIGHT, LL.B.....402 H. W. Hellman Bldg.  
Constitutional Law.
- HUGH NEAL WELLS, LL.B.....Security Bldg.  
Debating, Public Speaking and Parliamentary Law.
- BENJAMIN FRANKLIN BLEDSOE, A.B. (Judge of  
the U. S. District Court).....Federal Bldg.
- FRANK P. DOHERTY.....812 California Bldg.

CHAS. E. MILLIKAN, LL.M. .... 416 Tajo Bldg.  
Practice Court.

### **Judges of the Practice Court**

- Department 1—Kemper B. Campbell, LL.M., Presiding  
Judge.  
Department 2—Elmer R. McDowell, LL.M.  
Department 3—Walter Bowers, LL.M.  
Department 4—James S. McKnight, LL.B.  
Department 5—A. A. Kidder, Jr., LL.B.  
Department 6—A. L. Bartlett, LL.B.  
Department 7—R. W. Heffelfinger, LL.B.  
Department 8—Ewald Selph, LL.B.  
Department 9—O. R. W. Robinson, LL.B.  
Department 10—C. L. Bagley, LL.B.  
Department 11—Clair Enyeart, LL.M.  
Department 12—Ralph A. Chase, LL.B.  
Department 13—John B. Haas, LL.B.

### **Extra Session Judges**

- W. S. Allen, A.B.  
Frank P. Doherty, LL.B.  
J. Karl Lobdell, LL.B.  
Richard J. O. Culver, LL.B.  
James D. Taggart, A.B., LL.B.  
Thomas P. White, LL.B.  
Hugh N. Wells, LL.M.

### **Appeals**

- Gavin W. Craig (Judge of Superior Court, Los Angeles  
County).  
Frederick W. Houser (Judge of Superior Court, Los Angeles  
County).

# THE COLLEGE OF DENTISTRY

- GEORGE F. BOVARD, A.M., D.D., LL.D.....University  
President of the University.
- LEWIS E. FORD, D.D.S., Dean.....L. A. Investment Bldg.  
Professor of Clinical Dentistry.
- EDGAR PALMER, D.D.S.....922 S. Bonnie Brae St.  
Emeritus Dean.
- HENRY G. BRAINERD, A.B., M.D.....Exchange Bldg.  
Emeritus Professor of Medicine.
- CHARLES D. LOCKWOOD, A.B., M.D., F.A.C.S.....  
Pasadena, Cal.  
Professor of Oral Surgery.
- E. L. LEONARD, B.S., M.D.....Marsh-Strong Bldg.  
Professor of Bacteriology.
- B. F. ESHELMAN, D.D.S.....Story Bldg.  
Professor of Ceramic Art.
- A. HALDEN JONES, A.B., M.D.....Bradbury Bldg.  
Professor of Physics, Chemistry and Metallurgy.
- GARRETT NEWKIRK, M.D.....Pasadena, Cal.  
Professor of Dental Hygiene and Dental Ethics.
- JAMES D. McCOY, D.D.S.....Brockman Bldg.  
Professor of Orthodontia and Radiography, and Sec-  
retary of the Faculty.
- GEORGE H. WALKER, D.D.S.....Brockman Bldg.  
Professor of General Materia Medica.
- C. J. R. ENGSTROM, D.D.S.....Brockman Bldg.  
Professor of Prosthesis.
- A. C. LA TOUCHE, D.D.S.....College Bldg.  
Professor of Operative Dentistry, General and Dental  
Histology and Superintendent of the College.
- W. R. MOLONY, M.D.....Exchange Bldg.  
Professor of Anatomy and Chief of the Laboratory of  
Anatomy.
- J. WALTER REEVES, A.B., M.D.....Marsh-Strong Bldg.  
Professor of Physiology and General Pathology.



JULIO ENDELMAN, D.D.S.....College Bldg.  
Professor of Special Pathology, Therapeutics and  
Materia Medica.

JOHN C. HOPKINS, D.D.S.....College Bldg.  
Professor of Crown and Bridge Work, and Superin-  
tendent of the Operatory.

---

MELVIN ELLIS, Ph.D., M.D.....Consolidated Realty Bldg.  
Associate Professor of Anatomy.

DAVID D. THORNTON, M.D.....Wright & Callender Bldg.  
Associate Professor of Oral Surgery.

E. F. THOLEN, M.D., D.D.S.....Brockman Bldg.  
Associate Professor of Oral Surgery.

JOHN R. McCOY, D.D.S.....Brockman Bldg.  
Assistant Professor of Orthodontia.

---

INGLE CARPENTER, Ph.D., LL.B.....California Bldg.  
Lecturer on Dental Jurisprudence.

WAYNE P. HANSON, M.D.....Broadway Central Bldg.  
Lecturer and Demonstrator of Anatomy.

EDWIN H. SCHNEIDER, M.D.....Investment Bldg.  
Demonstrator of Anatomy.

I. D. NOKES, D.D.S.....Marsh-Strong Bldg.  
Lecturer on Comparative Anatomy and Odonto-  
graphy, Curator of the College Museum.

W. J. BELL, D.D.S.....1046 W. 35th Place  
Demonstrator and Lecturer in Electricity.

ROY L. SPENCER, D.D.S.....Merchants Nat'l Bank Bldg.  
Lecturer on Extractions and Anesthesia, Senior  
Demonstrator of Extractions.

JOHN MacKENZIE BROWN, M.D., F.A.C.S.....  
.....Brockman Bldg.  
Lecturer in Rhinology and Laryngology.

R. S. CUMMINS, M.D.....Merchants Natl. Bank Bldg.  
Lecturer on Internal Medicine.

- E. LESLIE EAMES, D.D.S.....Auditorium Bldg.  
Lecturer on Prosthesis.
- MAXWELL M. DIXON, D.D.S.....Story Bldg.  
Demonstrator of Oral Prophylaxis and Pyorrhea  
Alveolaris.
- G. MAURICE CROW, D.D.S.....Wright & Callender Bldg.  
Assistant in Oral Prophylaxis.
- D. ARTHUR JOHNSTON, D.D.S.....Title Insurance Bldg.  
Assistant in Oral Prophylaxis.
- J. T. LOUGHAN, D.D.S.....Baker-Detwiler Bldg.  
Assistant in Oral Prophylaxis.
- THOMAS LYNCH, D.D.S.....California Bldg.  
Assistant in Oral Prophylaxis.
- H. C. KING, D.D.S.....Consolidated Realty Bldg.  
Demonstrator of Porcelain Work.
- CLARENCE E. WORTH, D.D.S....Consolidated Realty Bldg.  
Demonstrator of Ceramic Art.
- MARK KELSEY, D.D.S.....Story Bldg.  
Demonstrator of Dental Ceramics.
- RICHMOND C. LANE, D.D.S.....Story Bldg.  
Assistant in Oral Surgery.
- H. E. STRAUB, D.D.S.....Story Bldg.  
Assistant in Oral Surgery.
- F. G. STALEY, D.D.S.....College Bldg.  
Demonstrator of Prosthesis.
- WARREN D. GILL, D.D.S.....L. A. Investment Bldg.  
Demonstrator of Prosthesis.
- J. T. PARKER, JR., D.D.S.....Pasadena, Cal.  
Demonstrator of Operative Technics.
- T. L. MILLHAM, D.D.S.....6422 Hollywood Blvd.  
Demonstrator of Operative Dentistry.
- C. H. WAKE, D.D.S.....College Bldg.  
Demonstrator of Operative Technics.
- E. C. UNDERHILL, D.D.S.....College Bldg.  
Demonstrator of Operative Dentistry.

- H. E. CANNON, D.D.S.....5636 Pasadena Ave.  
Demonstrator of Operative Dentistry.
- FRANK L. PLATT, D.D.S.....  
.....Elkan Gunst Bldg., San Francisco  
Lecturer and Clinical Instructor in Local Anaesthesia.
- C. J. APABLASA, D.D.S.....Hollingsworth Bldg.  
Instructor in Extractions.
- JULIUS HAMILTON, M.D.....  
Assistant in Physiology.
- R. F. BELL, D.D.S.....Baker-Detwiler Bldg.  
Assistant in Chemistry.

### THE MACLAY COLLEGE OF THEOLOGY

- GEORGE FINLEY BOVARD, A.M., D.D., LL.D., University  
President of the University.  
Lecturer on Special Subjects.
- EZRA A. HEALY, A.M., S.T.D., Dean.....841 W. 36th Street  
Systematic Theology.
- W. E. TILROE, B.D., D.D.....1017 W. 34th St.  
Homiletics.  
Pastoral Theology.
- TULLY C. KNOLES, A.M.....1204 W. 31st St.  
Historical Theology.
- JAMES BLACKLEDGE, A.M.....1136 W. 36th Place  
Hebrew Language and Literature.
- JOHN G. HILL, A.M., S.T.B., Ph.D.....854 W. 35th Place  
Hermeneutics.  
English Bible.
- JAMES MAIN DIXON, A.M., L.H.D., F.R.S.E.....  
.....427 N. Ardmore Ave.  
Oriental Missions.  
Comparative Religion.
- ROBERT J. TAYLOR, A.M.....4166 Normandy  
Missions, History and Present Status.
- JOHN HEDLEY .....Redondo Beach  
Chinese Missions.

- CLAUDE C. DOUGLAS, A.M.....1315 E. 40th St.  
New Testament Greek.
- ROCKWELL D. HUNT, A.M., Ph.D.....824 W. 35th Place  
Economics and Sociology.
- EMORY S. BOGARDUS, A.M., Ph.D.....1133 W. 41st St.  
Economics and Sociology.
- JOHN HAROLD MONTGOMERY, M.S., E.E.....  
.....1319 W. 37th Place  
Religious Education.

### THE COLLEGE OF PHARMACY

- GEORGE FINLEY BOVARD, A.M., D.D., LL.D.....  
.....University  
President of the University.
- LAIRD J. STABLER, D.Sc., Ph.C.....122 W. 30th St.  
Dean and Professor of Chemistry and Toxicology.
- ALBERT B. ULREY, A.M.....1435 W. 23rd St.  
Professor of Physiology and Hygiene.
- ARTHUR R. MAAS, Ph.C.....1121 W. 51st Place  
Professor of Pharmacy and Materia Medica.
- ANDREW C. LIFE, A.M.....1370 W. 36th Place  
Associate Professor of Botany.
- JOHN H. BLUMENBERG, Phar.B.....2230 W. 30th St.  
Assistant Professor of Pharmacy.
- RALPH T. GOODWIN, A.B., Ph.C.....1125 W. 30th St.  
Assistant Professor of Materia Medica and Pharma-  
cognosy.
- CHARLES W. HILL, Ph.G.....326 S. San Pedro St.  
Lecturer on Industrial Chemicals.
- E. E. LEIGHTON.....714-18 California Bldg.  
Lecturer on Pharmacal Jurisprudence.
- ERWIN H. MILLER, B.S.....1051 W. 35th St.  
Lecturer on Food and Drug Adulterations.
- L. SCHIFF.....1337 S. Hope St.  
Lecturer on Commercial Pharmacy.

- REX DUNCAN, M.D.....638 Van Nuys Bldg.  
Lecturer on First Aid to the Injured.
- WILLIAM R. LA PORTE, A.B.....1017 W. 35th St.  
Director of Men's Gymnasium.
- ARTHUR MORSE.....  
Assistant in Chemistry.

### THE COLLEGE OF MUSIC

- WALTER FISHER SKEELE, A.B., Dean....136 E. Avenue 55  
Professor of Piano and Pipe Organ.
- CHARLES E. PEMBERTON.....678 S. Burlington Ave.  
Professor of Violin Harmony, Counterpoint, History and Musical Theory.
- ARTHUR M. PERRY.....1749 W. 25th St.  
Instructor in Violin.
- MRS. NORMA ROCKHOLD ROBBINS.....  
.....911 Lomita Ave., Glendale, Cal.  
Instructor in Voice Culture.
- HORATIO COGSWELL, A.M.....1244 Van Ness Ave.  
Instructor in Voice Culture.
- LILLIAN J. BACKSTRAND.....1017 W. 36th St.  
Instructor in Voice Culture.
- MRS. HENRY G. SANGER.....1381 E. 23rd St.  
Instructor in Voice Culture.
- C. ADELAIDE TROWBRIDGE.....Fowler Apts.  
Instructor in Piano.
- M. ESTHER DAVIDSON.....218 S. Avenue 66  
Instructor in Piano.
- C. G. STEWART.....Mason Opera House  
Instructor in Violincello.
- WILLIAM H. MEAD.....Blanchard Bldg.  
Instructor in Flute.
- C. S. DELANO.....2610 W. 8th St.  
Instructor in Guitar and Mandolin.



- J. J. KOZLOWSKI.....Blanchard Bldg.  
Instructor in Clarinet.
- PEARL ALICE MACLOSKEY.....1017 W. 36th St.  
Secretary to the Dean.

### THE COLLEGE OF ORATORY

- BEULAH WRIGHT, Dean.....344 St. Andrews Place  
Professor of Dramatic Art and the Speaking Voice.
- GERTRUDE COMSTOCK, Ph.B.....2000 Miramar St.  
Associate Professor of Interpretation.
- ELIZABETH YODER.....1313 W. 8th St.  
Associate Professor of Interpretation.
- EVA MAE SMITH, A.B.....1313 W. 8th St.  
Associate Professor of Expression.
- JAY L. CHESNUTT, A.B.....3974 La Salle St.  
Professor of Public Speaking, Debate, Oratory.
- THOMAS B. STOWELL, Ph.D., L.L.D.....2702 Hobart Blvd.  
Professor of Education.
- ALLISON GAW, A.M., Ph.D.....1259 W. 35th St.  
Professor of English Language and Literature.
- ROCKWELL D. HUNT, A. M., Ph.D.....824 W. 35th Place  
Professor of Economics and Sociology.
- FESTUS E. OWEN, A.M.....621 W. 34th St.  
Professor of Philosophy and Psychology.
- TULLY C. KNOLES, A.M.....1204 W. 31st St.  
Professor of History.
- LAWRENCE M. RIDDLE, A.M.....1270 W. 37th Drive  
Professor of Language and Literature.
- ALBERT B. ULREY, A.M.....1435 W. 23rd St.  
Professor of Biology.
- EDNA COCKS, A.B.....701 W. 36th St.  
Associate Professor of Physical Education.
- WILLIAM RALPH LA PORTE, A.B.....1317 W. 35th St.  
Professor of Physical Education.

**THE COLLEGE OF FINE ARTS**

WILLIAM LEES JUDSON,  
Dean.

AVA CLARISSA WELLS,  
Painting and Drawing.

FRANK GEORGE TAPNER,  
Metal and Jewelry.

EMMA FRANCES BRIDGES,  
Applied Arts.

LORENA BERNARDINE HILTY,  
Design.

ERNEST BRAUNTON,  
Landscape Gardening.

ARTHUR CLASON WEATHERHEAD,  
Architectural Drawing.

VIRGINIA RAMSEY,  
Secretary.

**ASSISTANTS**

MADELINE FOUCHAUX,  
Art History.

MARIE S. CLAKE,  
Advanced Art History.

OSCAR HAMMERCAS,  
Still Life.

ISABELLE PATTERSON,  
Mythology.

PAUL S. SPRUNCK,  
Anatomy.

# THE COLLEGE OF LIBERAL ARTS

## ORGANIZATION

The College of Liberal Arts is organized into Undergraduate Departments and a Graduate Department.

Four year major courses, leading to the degree of Bachelor of Arts, are offered in the following Undergraduate Departments: Biology, Chemistry, Economics, Education, English, French, German, History, Journalism, Latin, Mathematics, Oriental Studies, Philosophy, Physics, Physical Education, Political Science, Religious Education, Sociology and Spanish.

Four year courses, leading to the degree of Bachelor of Science, are offered in Architecture, Civil Engineering and Electrical Engineering.

The Departments of Agriculture, Chemical Engineering and Mining Engineering at present offer only the first two years of a four year course.

Elective courses are also offered in the Departments of Art and Design, Drawing, Geology, Greek, Italian, Music and Oratory.

The Graduate Department offers courses leading to the degree of Master of Arts in Biology, Chemistry, Economics, Education, English, French, German, Greek, History, Latin, Mathematics, Philosophy, Physics and Sociology. It also offers courses leading to the University Recommendation for the High School Teacher's Certificate in Biology, Chemistry, Economics, Education, English, French, German, History, Latin, Mathematics, Physics, Spanish and Sociology.

## THE UNDERGRADUATE COURSES

### CONDITIONS OF ADMISSION

There are three classes of admissions to the undergraduate courses: (a) admission to Freshman standing; (b) admission to advanced standing; and (c) admission as special student.

a. **Candidates for admission to Freshman standing** must be at least sixteen years of age and must present evidence of good moral character. They must also give, either by certificate or by examination as hereafter described, evidence of preparation in fifteen units of preparatory subjects selected from the general list of subjects described on the following pages. For admission to the course leading to the degree of Bachelor of Arts these fifteen units must be made up as follows:

English .....	2 units*
A Foreign Language.....	2
Laboratory Science.....	1
Algebra and Plane Geometry.....	2
United States History and Civics.....	1
Electives .....	7

The laboratory science may be Botany, Zoology, Physiology, Physics, or Chemistry.

For admission to the courses in Engineering the fifteen units must include the following:

English .....	2 units
A Modern Language.....	2
Chemistry .....	1
Physics .....	1
Elementary Algebra.....	1
Advanced Algebra.....	1
Plane Geometry.....	1
Trigonometry and Solid Geometry.....	1
United States History and Civics.....	1
Freehand Drawing.....	1
Mechanical Drawing.....	1
Electives .....	2

---

\*The term "unit" is here used to denote a preparatory subject studied through one school year with five class exercises (or the equivalent) per week.

## Complete List of Admission Subjects

Eng. Grammar and Comp.....	1/2	Civics .....	1/2
Eng. Lit., Elementary.....	1	Social Science .....	1/2, 1
Eng. Lit., Advanced .....	1	Algebra, Elementary .....	1
Eng. Lit., History of.....	1/2	Algebra, Advanced .....	1
Latin, Elementary .....	2	Plane Geometry .....	1
Latin, Advanced .....	1, 2	Plane Trigonometry .....	1/2
Greek, Elementary .....	2	Solid Geometry .....	1/2
Greek, Advanced .....	1	Botany .....	1
German, Elementary .....	2	Zoology .....	1
German, Advanced .....	1, 2	Chemistry .....	1
French, Elementary .....	2	Physics .....	1
French, Advanced .....	1, 2	Physiology .....	1
Spanish, Elementary .....	2	Physical Geography .....	1
Spanish, Advanced .....	1, 2	General Science .....	1
History, Grecian and Roman.....	1	Freehand Drawing .....	1/2, 1
History, Mediaeval and Modern....	1	Mechanical Drawing .....	1/2, 1
History, English .....	1	Vocational Subjects .....	1, 2, 3
History, United States.....	1/2		

**Admission by Certificate.** The candidate, having completed a regular course in the University High School of this University or in an accredited high school, is admitted to the Freshman class without examination, on presenting a certificate signed by the principal. Unconditional credit is given only for entrance subjects in which the candidate is specifically recommended.

The Faculty reserves the right, however, to require an examination upon any or all of the studies set for entrance, whenever there is doubt that the preparation has been sufficient. To increase the probability of entrance without examination, credentials should be presented as early as possible before registration. Blanks of application for admission may be obtained by applying to the Registrar.

**Admission by Examination.** Entrance examinations in all the required admission subjects not covered by certificate from an accredited school are held in September.

**b. Candidates for admission with Advanced Standing** are of two types:

1. Students from other institutions of recognized collegiate rank, including Junior Colleges with well established courses, may be admitted to such standing and upon such terms as the Faculty may deem equitable. Every such candi-



date is required to present a catalogue of the institution in which he has studied; a full statement, duly certified, of the subjects he has there completed and of the subjects there presented for entrance; and a letter of honorable dismissal. The Faculty reserves the right to determine, after a test of at least one semester, the amount of credit that the applicant may receive.

2. Graduates of State Normal Schools who are also graduates of accredited high schools, may receive tentative advanced credit amounting to from 30 to 45 units.

3. **Candidates for admission as Special Students** must be persons of mature age who desire to take up special work in one department, or in one subject with its related branches. Such special students are not candidates for a degree; but they may become candidates by satisfying the entrance requirements for a regular course. Such students come under the same regulations as regular undergraduates, and forfeit their privileges by failure to maintain a good standing.

## DESCRIPTION OF ADMISSION SUBJECTS

1. **English Grammar and Composition.** It is expected that the candidate for admission will have acquired during his high school course a command of correct and clear English, spoken and written. As a result of classroom study of grammar and rhetoric, in addition to much practice in actual writing, he must be prepared to answer specific questions upon the practical essentials of those subjects, such as the relations of the various parts of the sentence to each other, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors. He must be able to write an essay developing a theme through several paragraphs, free from marked deficiencies in spelling, punctuation, sentence-structure, and paragraphing, and indicative of ability to think consecutively on a simple subject.

A preliminary examination is given to all students before enrolling them permanently in the required course in Freshman English composition, and each student found deficient in such preparation is required to register in the Sub-Freshman English courses 1a or 1b, or both, for which no credit is given. In cases of marked deficiency the enrollment of the student in the class in Freshman English is cancelled. No grade is given in Freshman English under any circumstances until all deficiencies are made up. (1½ units.)

**2. English Literature.** The standard maintained is that of the National College Entrance Examination Board. The division of units is as indicated below.

(a) **ELEMENTARY ENGLISH LITERATURE.**—Such a reading of the following works (or their equivalents), grouped as indicated, as shall give the student the habit of intelligently reading a book as an artistic unit. **At least two selections are to be made from each of the following five groups**, except as otherwise provided under Group 1. Each selection must include all the work or works included between two dashes. (1 unit.)

Group 1. Classics in translation. The “Old Testament,” comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the Books of Ruth and Esther.—The “Odyssey” (with the omission, if desired, of Books i, iii, iv, v, xv, xvi, and xvii).—The “Iliad” (with the omission, if desired, of Books xi, xiii, xiv, xv, xvii, and xxi).—The “Aeneid.” (For any selection from this group a selection from any other group may be substituted.)

Group 2. Shakespeare. “A Midsummer-Night’s Dream.”—“The Merchant of Venice.”—“As You Like It.”—“Twelfth Night.”—“The Tempest.”—“Romeo and Juliet.”—“King John.”—“Richard II.”—“Richard III.”—“Henry IV.”—“Coriolanus.”—“Julius Caesar.”—“Macbeth.”—“Hamlet.” (The last three if not chosen for study under (b).)

Group 3. Prose Fiction. Malory's "Morte d'Arthur" (about 100 pages).—Bunyan's "Pilgrim's Progress."—Swift's "Gulliver's Travels" (the voyages to Lilliput and to Brobdingnag).—Defoe's "Robinson Crusoe," Part I.—Goldsmith's "Vicar of Wakefield."—Frances Burney's "Evelina."—Any of Scott's novels.—Any of Jane Austen's novels.—Miss Edgeworth's "Castle Rackrent" or "The Absentee."—Any of Dickens' novels.—Any of Thackeray's novels.—Any of George Eliot's novels.—Mrs. Gaskell's "Cranford."—Kingsley's "Westward Ho!" or "Hereward, the Wake."—Reade's "The Cloister and the Hearth."—Blackmore's "Lorna Doone."—Hughes' "Tom Brown's Schooldays."—Stevenson's "Treasure Island" or "Kidnapped" or "The Maser of Ballantrae."—Any of Cooper's novels.—Selected tales from Poe.—Hawthorne's "The House of the Seven Gables" or "Twice Told Tales" or "Mosses from an Old Manse."—A collection of short stories from various standard authors.

Group 4. Essays, Biography, etc. Addison and Steele's "Sir Roger de Coverly Papers" or selections from the "Tatler" and "Spectator" (about 200 pages).—Selections from Boswell's "Life of Johnson" (about 200 pages).—Franklin's "Autobiography."—Irving's "Sketch Book" (about 200 pages) or "The Life of Goldsmith."—Southey's "Life of Nelson."—Lamb's "Essays of Elia" (about 100 pages).—Lockharr's "Life of Scott" (about 200 pages).—Thackeray's "English Humorists" (lectures on Swift, Addison, and Steele).—Macaulay's "Essays" (any one of those on Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederick the Great, or Madame d'Arblay).—Trevelyan's "Life of Macaulay" (about 200 pages).—Ruskin's "Sesame and Lilies" or "Selections" (150 pages).—Dana's "Two Years Before the Mast."—Selections from Lincoln (two Inaugurals, Speeches in Independence Hall and at Gettysburg, the Last Public Address, the letter to Horace Greeley, and a brief memoir or estimate of Lincoln).—Parkman's "The Oregon Trail."—Thoreau's "Walden."—Selected essays from Lowell (about 150 pages).—Holmes' "Autocrat of the Breakfast Table"—Stevenson's "An

Inland Voyage" and "Travels with a Donkey"—Huxley's "Autobiography" and selections from "Lay Sermons" (including "Improving Natural Knowledge," "A Liberal Education," and "A Piece of Chalk").—A collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, and later writers.—A collection of letters by various standard writers.

Group 5. Poetry. Palgrave's "Golden Treasury (First Series)," Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns.—Palgrave's "Golden Treasury (First Series)," Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under (b)).—Goldsmith's "The Traveller" and "The Deserted Village."—Pope's "The Rape of the Lock"—A collection of English and Scottish ballads (as the Robin Hood ballads, "The Battle of Othterburn," "King Estmere," "Young Beichan," "Bewick and Grahame," "Sir Patrick Spens," etc.)—Coleridge's "The Ancient Mariner," "Christabel," and "Kubla Khan."—Byron's "Childe Harold," canto III or IV, and "The Prisoner of Chillon"—Scott's "The Lady of the Lake" or "Marmion."—Macaulay's "Lays of Ancient Rome," "The Battle of Naseby," "The Armada," and "Ivry."—Tennyson's "The Princess" of "Gareth and Lynette," "Lancelot and Elaine," and "The Passing of Arthur."—Browning's "Cavalier Tunes," "The Lost Leader," "How They Brought the Good News from Ghent to Aix," "Home Thoughts from Abroad," "Home Thoughts from the Sea," "An Incident of the French Camp," "Herve Riel," "Pheidippides," "My Last Duchess," "Up at a Villa—Down in the City," "The Italian in England," "The Patriot," "The Pied Piper," "De Gustibus"—and "Instans Tyrannus."—Arnold's "Sohrab and Rustum," and "The Forsaken Merman."—Selections from "American Poetry," with special attention to Poe, Lowell, Longfellow, and Whittier.

(b) ADVANCED ENGLISH LITERATURE.—Such a study of the following works, grouped as indicated, as shall enable the student to answer questions upon their content, form and structure; upon the meanings of such words,



phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style; and upon their relations to their author's life, other works, and literary environment. **One selection is to be made from each of the following groups.** (1 unit.)

Group 1. Drama. Shakespeare's "Julius Caesar."—"Macbeth."—"Hamlet."

Group 2. Poetry. Milton's "L'Allegro," "Il Pensero," and either "Comus" or "Lycidas."—Tennyson's "The Coming of Arthur," "The Holy Grail," and "The Passing of Arthur."—The selections from Wordsworth, Keats and Shelley, in Book IV of Palgrave's "Golden Treasury (First Series)."

Group 3. Oratory. Burke's "Speech on Conciliation with America."—Macaulay's "Speech on Copyright" and Lincoln's "Speech at Cooper Union."—Washington's "Farewell Address" and Webster's "First Bunker Hill Oration."

Group 4. Essays. Carlyle's "Essay on Burns" (with a selection from Burns' "Poems").—Macaulay's "Life of Johnson."—Emerson's "Essay on Manners."

(c) HISTORY OF ENGLISH LITERATURE.—A brief outline of the history of English literature, emphasizing the salient characteristics of the successive literary periods from the "Beowulf" to the present day, and associating with each its chief books and authors. ( $\frac{1}{2}$  unit.)

3. **Elementary Latin.** For the requirements in Elementary Latin there are necessary an accurate pronunciation, a thorough knowledge of regular forms and of the principles of syntax, a vocabulary of about fifteen hundred words, and the ability to translate easy prose at sight and to write simple sentences. These attainments can be secured from the careful study of an elementary text-book and four books of Caesar, together with oral and written composition and occasional practice in sight translation. The examination in composition in 1915-1916 will be based on the second book of Caesar's "Gallic War." (2 units.)



**4. Advanced Latin.** For the requirements in Advanced Latin there are necessary the ability to translate at sight portions of Cicero's orations and Vergil's "Aeneid," familiarity with the principles of the Latin hexameter, and the ability to translate a passage of connected English based on Cicero. These attainments can be secured from the careful study of six of Cicero's orations and six books of Vergil's "Aeneid," together with very thorough drill in oral and written composition. It is expected that certified composition book will be presented for entrance credit. The examination in composition in 1915-1916 was based on the oration "Pro Archia." (2 units; without the composition, 1 unit.)

**5. Greek.** First year's work. The exercises in any of the beginning books and one book of the "Anabasis" or its equivalent. Second year's work: Three additional books of the "Anabasis" or an equivalent. Book I-III of the "Iliad" or an equivalent. Composition equal to one exercise a week for one year. (First and second years, together, 2 units.)

**6. Advanced Greek.** Third year's work: Three additional books of the "Iliad," three of the "Odyssey," and either Plato's "Apology" and "Crito," or Herodotos, books VI-VII-VIII, or the equivalent from some other author. (1 unit.)

**7. German.** A knowledge of the inflections of the articles, nouns, adjectives, pronouns, weak verbs, and the usual strong verbs; familiarity with the use of the modal auxiliaries and the common prepositions, with the simpler uses of the subjunctive, and with the principles governing order of words; and the ability to read and translate such stories and plays as Storm's "Immensee" and Benedix's "Der Prozess," to translate easy English into German, to translate at hearing, and to pronounce correctly (2 units.)

**8. Advanced German.** Greater fluency in reading and translating German; the ability to re-tell an episode or short story and to explain words and phrases in German; familiarity with the uses of the subjunctive mode, especially in indirect discourse, and with the formations of the passive

voice, and a general strengthening of the knowledge of grammatical forms. This knowledge may be attained by reading and translating from 500 to 600 pages of German, with much viva voce practice in the form of questions on the text and explanations in German. Two lessons a week should be devoted to prose composition and oral practice in grammar and vocabulary. (2 units.)

9. **French.** A knowledge of the essentials of grammar, including the inflections of nouns, adjectives, pronouns, and regular and common irregular verbs; familiarity with the use of the personal pronouns and with the elementary rules of syntax; and the ability to pronounce accurately, to read smoothly, to translate modern stories and plays, such as About's "Le Roi des Montagnes" and Labiche and Martin's "Le Voyage de M. Perrichon"; to translate at hearing and at sight; and to translate easy English into French. (2 units.)

10. **Advanced French.** A thorough knowledge of grammar. The reading from nineteenth century authors of 500 to 700 pages beyond the work of the first two years. Advanced composition with particular reference to idiom. The ability to understand and to express oneself in ordinary French. (2 units.)

11. **Spanish.** The essentials of Spanish Grammar. Readings from such a text as Hill's "Spanish Tales for Beginners," and one or more novels. Simple conversation in Spanish. Special importance is attached to a knowledge of Spanish verbs. (2 units.)

12. **Advanced Spanish.** Two years of work, including the careful reading of short stories and such novels as "Marianela," "El Capitán Veneno," "Gil Blas," and "Pepita Jiménez." Crawford's "Composition" and Ramsey's "Grammar." Conversation. (2 units.)

13. **Grecian and Roman History.** Myers' "Greek and Roman History"; Wolfson's "Essentials in Ancient History"; West's "Ancient History"; or an equivalent. Class room discussions, not book work, and reports. (1 unit.)

14. **Mediaeval and Modern History.** Myers' "Mediaeval and Modern History." Robinson's "History of Western Europe"; or an equivalent. Recitations and reference notebook work. (1 unit.)

15. **English History.** Coman and Kendall, or Cheyney's "History of England," or an equivalent. Recitations, notebook work, and reports. (1 unit.)

16. **United States History.** Channing's "Student's History of the United States"; Muzzey's "American History"; or an equivalent. Recitations, notebook work, and reports. ( $\frac{1}{2}$  unit.)

17. **Civil Government.** Ashley's "American Government," or an equivalent. Reference work and class room discussion. The keeping of notebooks is desirable. ( $\frac{1}{2}$  unit.)

18. **Elementary Algebra.** This should include the following subjects: The four fundamental operations with emphasis placed on the type-forms in multiplication and division; factoring, the highest common factor, and lowest common multiple; fractions and fractional equations; simultaneous equations of the first degree; the binomial theorem for a positive integral exponent; evolution; the theory of exponents; radicals; quadratic equations; and the solution of problems involving the various classes of equations. Emphasis should be placed on factoring and on the solutions of equations. (1 unit.)

19. **Advanced Algebra.** This should include the following subjects: Mathematical induction; the proof and the use of the remainder and the factor theorems; evolution, including the extraction of any root of algebraic polynomials, and also of arithmetic numbers; the theory of exponents; complex numbers; radicals and irrational equations; the theory of quadratic equations; simultaneous quadratics; inequalities; ratio, proportion and variation; arithmetic, geometric, and harmonic series; logarithms; permutations and combinations; limits and infinite series; the binomial theorem for any ex-

ponent; functionality and graphic representation; the theory of equations. Emphasis should be placed on the solution of equations by factoring, and on the demonstration of laws and principles. (1 unit.)

20. **Plane Geometry.** This includes the usual theorems and problems of elementary plane geometry. An important part of the work should be the solution of original exercises, including problems in mensuration. (1 unit.)

21. **Trigonometry and Solid Geometry.** The development of the general formulæ of elementary plane trigonometry; the theory of logarithms and the use of logarithmic tables; and the numerical solution of plane triangles, and of simple problems in heights and distance. The fundamental propositions of solid geometry and especially those of spherical geometry. (1 unit.)

22. **Chemistry.** Laboratory and text-book work for one school year, such as outlined in McPherson and Henderson's, Brownlee's, or Morgan's elementary texts. At least four hours per week throughout the year of actual laboratory practice is required to complete the amount of laboratory work desired. (1 unit.)

23. **Physics.** The equivalent of one year's work, including both laboratory and text-book work. Accurate notes of the laboratory work should be kept. Gage's "Elements" or Carhart and Chute's "High School Physics" will serve to indicate the amount of text-book study required. (1 unit.)

24. **Botany.** A study of types of plant groups, both in the laboratory and in the field. Drawings and notes made directly from the specimens must be submitted as evidence of the character of the work done. A full year's work. (1 unit.)

25. **Zoology.** One year's work on the structure, relationship, and habits of animals. Laboratory note-books with drawings will be required. (1 unit.)

26. **Physiology.** An equivalent of Martin's "Human Body, Shorter Course." (1 unit.)

27. **Physical Geography.** The study of one of the leading text-books, supplemented by at least forty exercises in individual laboratory work. (1 unit.)

28. **Freehand Drawing.** The study of light and shade and perspective, by drawing and shading with the pencil from geometric and simple life objects. ( $\frac{1}{2}$  to 1 unit.)

29. **Mechanical Drawing.** The use of drawing instruments in line work, the construction of geometrical problems, and simple projection. ( $\frac{1}{2}$  to 1 unit.)

30. **General Science.** The subject should be treated from the general scientific standpoint rather than from the standpoints of the several subdivisions. The course should deal with the elementary principles involved in gardening, sanitation, household operations, machinery, and various natural phenomena. (1 unit.)

31. **Social Science** (1 unit), which may be made up from the following:

(a) **Commercial and Industrial History.** This subject should include the development of the commercial and industrial activities of the western world from the time of the Roman Empire to the present time. The course should be essentially a history of Western Europe from the economic standpoint. ( $\frac{1}{2}$  or 1 unit.)

(b) **Economic Geography.** This course should comprise a study of countries, products, and trade routes in relation to the economic interests of man. ( $\frac{1}{2}$  unit.)

(c) **Economics.** A knowledge of the fundamental principles of economic science, including such subjects as the division of labor, the factors of production, demand and supply, value and prices, and international trade. A good text should form the basis of the course. ( $\frac{1}{2}$  unit.)

(d) **Sociology.** A systematic study of the underlying features of social progress, with constant reference to actual conditions in contemporaneous society. A good recent text



should be used, carefully selected readings assigned, and student exercises required. ( $\frac{1}{2}$  unit.)

(e) **Commercial Law.** This course should include a study of the rights and privileges and corresponding duties and obligations of men in commercial pursuits. The common law and statute law in ordinary business transactions should be studied.

**32. Vocational Subjects.** One, two, or three units of well established courses of vocational work in accredited high schools may be presented among the electives.

**Note**—In the case of students graduated from a recommended high school, credit may be allowed for such subjects, not designated in this list, as are recommended by the principal and approved by the University faculty. Candidates who offer subjects in Science may be required to present their note-books.

## THE UNDERGRADUATE ARTS COURSES

The College offers regular undergraduate courses with major subjects as follows: Biology (Zoology or Botany), Chemistry, Economics, Education, English, French, German, Greek, History, Journalism, Latin, Mathematics, Oriental Studies, Philosophy and Psychology, Physics, Political Science, Religious Education, Sociology, and Spanish. Each of these courses is designed to give a liberal education, extends through four years, and leads to the degree of Bachelor of Arts.

Each course requires completion of one hundred and twenty units of college work, exclusive of the requirements in Physical Education. In this connection a "unit" means one exercise a week throughout a semester, each exercise to represent, for the average student, one hour of recitation or lecture and two hours of preparation or of subsequent reading per week, or an equivalent amount of work in laboratory courses.

Lower Division courses are usually to be taken in the Freshman and Sophomore years and Upper Division courses in the Junior and Senior years. Sixteen units per semester for the Lower Division and fourteen for the Upper Division is considered full work.

Before the beginning of the Sophomore year every student shall make choice of the department in which he desires to pursue his major course. His work will thereafter be under the direction of the professor who is at the head of that department. It is advisable that this choice be made as soon after matriculation as possible, so that the entire work of the student may be properly planned.

### **Requirements for Degree of Bachelor of Arts**

The following work must be completed in candidacy for the degree of Bachelor of Arts:

#### **A. The General College Requirements.**

**English 1.** One year; six units.

**Science.** One year; eight or ten units. The science may be Chemistry, Physics, Botany, or Zoology.

**Foreign Language.** Two years; sixteen units. The language may be Latin, Greek, German, French, Spanish, or Italian. If the language offered for entrance is continued, the requirement is reduced to six units.

**Psychology.** One year; six units.

**History or Economics.** One year; six units.

**Physical Education.** Two years; four units. To be completed by the end of the Sophomore year.

#### **B. The required subjects in the major department.**

**C. A minor subject,** approved by the major department.

**D. Elective courses,** to be selected by the the student with the advice of his major professor, sufficient to complete the required 120 units.

**E.** It is also required that thirty-six of the units completed during the Junior and Senior years shall be in Upper Division courses.

### Options in the Professional Schools

**Law.**—When 94 units, including all the general college requirements and a minimum of 24 units in the major department, have been completed in the College of Liberal Arts, and of these not less than 32 have been taken in the College of Liberal Arts of this University, the student may take the studies of the first year of the College of Law, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years in that college. Special consideration should be given to the following subjects: English (including Expression); Latin (at least two years if not covered by entrance credits); History (English and American), with special reference to Institutional and Constitutional; Logic; Philosophy; Economics and Sociology; and Political Science. For a description of the recommended pre-legal course see under College of Law.

**Medicine.**—When 94 units, including all the general college requirements and a minimum of 24 units in the major department, have been completed in the College of Liberal Arts, a student may take the first year in the College of Physicians and Surgeons, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years' work in that college. To this end the required subjects in the College of Liberal Arts are the same as those for the regular candidate for the degree of A.B., except that Biology should be the elected major and German or French the elected language (Latin being offered for entrance), and that in Science there is a requirement of one year **each** of Physics and Chemistry.

### The Courses of Engineering

The four-year courses in the Departments of Architecture, Civil Engineering and Electrical Engineering and the two-year course in the Department of Mining and Chemical Engineering are more exclusively technical than the Arts courses just described. The courses therefore differ from the foregoing in their regard to the general college requirements, in

their greater rigidity of outline, and in the increased number of hours assigned to the work of the various years. These technical courses lead to the degree of Bachelor of Science. For a description of the work, together with the full outlines of the required courses, see articles on **Engineering Courses** as indicated in the Index.

## CLASSIFICATION OF STUDENTS

Students will be classed as Sophomores who have no entrance conditions, and who have completed the first-year work in Physical Education and thirty-two semester units of work, including the first year of the General College Requirements, i. e., English I, a Science, one year's work in a Foreign Language, History or Economics.

Students will be admitted to the Upper Division and classed as Juniors who have completed sixty-four semester units of work in addition to the full requirements in Physical Education, and including all of the General College Requirements.

Upper Division students will be classed as Seniors who have completed ninety-two semester units of work.

Students in the Engineering Courses will be classified as Sophomores, Juniors or Seniors upon the basis of the completion of at least nine-tenths of the work outlined for the various years.

## MATRICULATION AND REGISTRATION

On or before the appointed registration days in September and February, each student must register at the Registrar's office, and must have entered upon a study card the subjects desired for the semester.

Students wishing to register for as few as ten or for more than eighteen units must petition the Credential Committee at the beginning of the semester.

No student may change his registration without presenting his reason on official blanks to the Registrar and securing his approval.

Students will not be given credit for work that is not recorded in the Registrar's office.

In the choice of subjects, all work necessary to remove conditions must be provided for first; and required subjects must take precedence of elective subjects.

In order that students may have careful consideration in selecting the subjects to be taken, the Registrar's office is kept open throughout the year. Students are urged therefore to present their credentials and complete their registration prior to the appointed registration days.

## ATTENDANCE, EXAMINATIONS AND GRADES

**Attendance** upon all class and laboratory exercises indicated upon the enrollment card is required. Absences are counted from the day on which instruction begins. All absences are reported to the office at the end of each semester. If the number of absences exceed one in a one-unit course, three in a two-unit course, five in a three-unit course, seven in a four-unit course, or nine in a five-unit course, the mark "Con." will appear in place of a grade and can be removed only by special arrangements with the instructor.

**Regular examinations** are held at the close of each semester in the studies that have been pursued in the different classes. After the examination the parent or guardian of every student receives from the office a report giving the student's standing in each subject for the semester.

**Scholarship Grades** are indicated by letters, as follows:

- A. Work of marked excellence.
- B. Thoroughly satisfactory work.
- C. Passing work.
- Con. Conditional, work not up to passing grade.
- R. Incomplete, indicating that while the work done is of passing grade, certain portions remain uncompleted.
- F. Failure.



The grades A, B, and B— are termed “recommended grades,” and pass the student in any subject. If the subject is reported “conditioned” or “incomplete,” such delinquency must be made up in such manner as the instructor may determine, within one year from the date of the failure. If the delinquency be not thus made up, the student is required to take the subject again with a class, before credit in said subject may be obtained.

**For special examinations** a fee of two dollars is charged.\* Such are:

1. Examinations for college entrance not taken at the regular times.
2. Examinations for college credit on work for which special credentials can not be supplied.
3. Special examinations to make up mid-semester or final examinations, whether the delinquency is caused by failure to pass or by absence.

## GRADUATION

**Requirements.** Upon the completion of one hundred and twenty units (exclusive of those in Physical Education) of the courses organized as above described, the student may be granted the degree of Bachelor of Arts, **provided**, that at least one academic year shall have been spent in residence in this college and that three-fourths of the total number of units presented for graduation, exclusive of those in Physical Education, and at least four-fifths of the work in the major department is of recommended grade.

The degree of Bachelor of Science will be given upon the completion of the required courses in Engineering, provided that at least one academic year shall have been spent in residence in this college and that three-fourths of the total number of units completed are of recommended grade.

---

\*Instructors are authorized to give such examinations only on presentation of the Treasurer's receipt for the fee in question.

**Graduation with Honors.**—Honor points are given as follows: For each unit of A grade, five points; for each unit of B grade, 4 points. A student who has completed 120 units of work and received 590 honor points may be graduated **magna cum laude**.

A student who has completed 120 units of work and received 560 honor points may be graduated **cum laude**.

In case more than 120 units are completed the number of points necessary for honors will be increased proportionately.

Engineering students may be graduated "with distinction" under rules established by the Committee on Engineering.

Under no circumstances will either of these honors be conferred upon a student who has spent less than two full years in this University.

## THE GRADUATE DEPARTMENT

### ORGANIZATION

The Graduate Department of the College of Liberal Arts of the University of Southern California was formally organized during the year 1910-11. General oversight of the Department is intrusted to the Graduate Council, which is a standing committee appointed from the faculty by the President of the University. The administrative officers of the Graduate Council for 1915-1916 are Thomas B. Stowell, Chairman; Rockwell D. Hunt, Secretary, and J. H. Montgomery, Registrar, who may be called upon for information and advice.

### PURPOSE

It is the purpose of the Graduate Department: (1) To give due prominence to graduate courses of instruction offered by the University; (2) to insure systematic and efficient administration of this advanced work; (3) to provide separate instruction for graduate and upper division students.

## THE GRADUATE COUNCIL

The Graduate Council consists of the following members of the Faculty:

George Finley Bovard, D.D., LL.D.,

President of the University.

Thomas B. Stowell, Ph.D., LL.D., Chairman.

Rockwell D. Hunt, Ph.D., Secretary.

J. H. Montgomery, M.S., E.E., Registrar.

Paul Arnold, Ph.M.

John G. Hill, Ph.D.

Emory S. Bogardus, Ph.D.

Roy Malcom, Ph.D.

James M. Dixon, L.H.D.

Festus E. Owen, A.M.

Edgar von Fingerlin, Ph.D.

Samuel Rittenhouse, Ph.D.

Allison Gaw, Ph.D.

Laird J. Stabler, Ms., Ph.C.

It is the function of the Graduate Council: (1) To define conditions of admission to the Graduate Department; (2) to provide courses of graduate instruction, and to pass judgment upon the graduate courses offered by the respective departments, no one of which courses shall become operative without the approval of the Council; (3) to pass upon the credentials of all candidates for graduate standing; (4) to establish and to maintain the requirements for all graduate degrees; (5) to formulate regulations for the effective organization and administration of the Graduate Department.

## ADMISSION TO THE GRADUATE DEPARTMENT

Admission to the Graduate Department of the College of Liberal Arts is granted to graduates of this College and to graduates of other colleges and scientific schools of recognized standing who present satisfactory evidence of character and qualifications. Other persons of suitable age and satisfactory attainment may be admitted to the advantages of the graduate courses upon approval by the Council. Admission to the courses of the Graduate Department does not necessarily imply admission to candidacy for a graduate degree.

An undergraduate student who is within 24 units of the Bachelor's degree may be permitted, with the approval of the Graduate Council and the major professor, to take graduate courses, provided that he be not carrying more than 12 units of undergraduate work. Such a student may register for only sufficient graduate work to bring the total number of units carried to fifteen. In all such cases a student must at the opening of the semester petition the Graduate Council for admission to the graduate courses he desires to take. If such a student afterwards matriculates for the degree of Master of Arts, the graduate courses previously taken by him are entered as "already completed" in his curriculum.

The steps required for admission to the Graduate Department are: 1. Consultation with the Chairman of the Graduate Council; 2. Consultation with the head of the department in which the student desires to do his major work; 3. Appearance in person before the Graduate Council for such further interrogation as that body may deem advisable. At the time of making application the student should present his credentials, including (1) his baccalaureate diploma; (2) certified transcripts from the records of institutions previously attended, listing all his preceding courses with their unit-values and the grades attained in each course; and, in the case of applicants seeking a high school teacher's credential, (3) certificates testifying to the quality of any previous teaching experience and the number of months during which such experience continued. Documents of the second and third classes above specified are retained by the University as matters of permanent record. If they are not immediately at hand at the time of the applicant's seeking admission, registration of the student is merely tentative, pending their presentation.

### DEPARTMENTS OF GRADUATE STUDY

The University is at present offering graduate courses in the following subjects:

Biology (animal), Biology (plant), Chemistry, Economics, Education, English, French, German, History, Journalism,



Latin, Mathematics, Philosophy and Psychology, Physics, Political Science and Sociology.

## THE DEGREE OF MASTER OF ARTS

The attainment of the degree of Master of Arts (A.M.) depends upon the completion of a well-rounded and carefully organized undergraduate and graduate course, at the end of which the candidate shall offer proof of high and sound intellectual attainment in his major subject, together with maturity of thought and some breadth of view. Under no circumstances will the degree be conferred until the candidate has completed, beyond this University's requirements for the Bachelors' degree, twenty-six units of graduate work, inclusive of the thesis; but **the mere satisfaction of any time or course-unit requirement, taken by itself, confers upon the candidate no right to the degree, his achievement of it depending mainly upon his natural abilities and his stage of scholarly advancement.** Undergraduate courses taken at other institutions are accepted at their full value so far as they conform to the standards of the various undergraduate departments of this University. Graduate courses from other institutions are similarly recognized, subject to the conditions of study "in residence" as hereafter prescribed.

Each candidate for the degree of Master of Arts must be registered in the Graduate Department of the College of Liberal Arts not later than the first Tuesday in October preceding his final A.M. examinations, and must pursue his course "in residence" for not less than one academic year. In this connection the term "in residence" is to be interpreted as meaning that the student is taking not less than four graduate units per semester, with the proviso that, as a rule, at least twelve of the units credited toward the attainment of the degree must be pursued at this University. For "residence" two summer sessions may be counted as equivalent to one semester.

The candidate who has not previously done graduate work in this University will begin his registration by applying for



admission to the Graduate Department by the method above indicated. He will then state the course of study which he wishes to pursue, which course must consist of a principal or "major" subject closely related to the major subject of his undergraduate course, and one or two subordinate or "minor" subjects satisfactorily related to the major subject and requiring not more than one-half the time given to it.\* The details of his course in this University will be determined upon consultation with the head of the department in which he wishes to major; and no subjects or units lacking the approval of the departmental head will be credited toward the degree.

A part of the course will consist of the completion of a thesis or dissertation embodying the results of an investigation on some subject in the major department. It is not the intention of the Graduate Council that this shall be a piece of highly recondite research such as would befit candidacy for the degree of Doctor of Philosophy; but it must be a serious, considerable, and printable piece of work demonstrating the writer's power of original thought, his thorough grasp of the subject matter involved, and his ability to present his material in a scholarly manner and style. The title of this essay must be presented for approval by the Graduate Council not later than six months before the month in which the degree is sought; a fairly complete bibliography must be similarly presented a month later; and the completed thesis, conforming in detail to the printed regulations furnished by the University, must be submitted to the Graduate Council six weeks before the conferring of the degree. In the case of those who are candidates for the conferring of the degree in June, these ultimate dates will be the first of December, the first of January, and the last Saturday in April.

---

\*Attention is called to the fact that in connection with the College of Liberal Arts the word "minor" is used in three different senses. An "undergraduate minor" consists of ten units in any subject related to his undergraduate major subjects. A "minor recommendation" for the High School Teacher's Certificate may be granted when the student receives his major recommendation, if he has had at least six units of work in the minor subject above Sophomore grade. A "minor" for the degree of Master of Arts must consist wholly of work of graduate standard.

respectively. To an accepted thesis will be assigned a minimum value of four units in the graduate course.

Upon the satisfactory completion of such an undergraduate and graduate course, tested by such methods as the various departments shall prescribe, and upon the acceptance of the thesis by a board of examiners appointed by the Graduate Council, the candidate will be recommended for the degree of Master of Arts.

### **THE DEGREE OF MASTER OF ARTS IN CONNECTION WITH THE COURSE IN MEDICINE**

Upon students who are pursuing the course in the Medical Department of the University the degree of Master of Arts may be conferred upon the following conditions:

1. The student must hold the Bachelor's degree from the College of Liberal Arts or from some other institution approved by the College.

2. He must have matriculated in the Graduate Department of the College of Liberal Arts at least two years before receiving the Master's degree.

3. His fitness for the field of work and his plan of study must receive the written approval of the head of the department in which he specializes and of the Graduate Council.

4. His research work must be planned with and under the direct supervision of the head of the department in which he specializes.

5. Quarterly reports must be made of progress made. These reports must be signed by the head of the department and sent to the Graduate Council.

6. He must have a reading knowledge of French and German.

7. The regulations of the College of Liberal Arts shall prevail concerning thesis and fees.

## THE HIGH SCHOOL TEACHER'S CERTIFICATE

The law provides that the State Board of Education shall prescribe general rules under which county boards and city and county boards of education may grant regular certificates of high school grade. These rules, together with the requirements of the University of Southern California, under which recommendations for such certificates are made, are summarized below.

### Group 1—Standard Group

1. Bachelor's degree from a standard college requiring not less than eight years of high school and college training.
2. One year (twenty-six units) of graduate work which must include one full year's course in at least one subject (major subject) in which recommendation is sought.
3. The satisfaction of the departmental requirements.
4. Fifteen units in Education, which may be completed in either undergraduate or graduate standing, or the two combined. These courses must include:
  - (a) School Management, 2 units.
  - (b) Secondary Education, 2 units.
  - (c) Practice Teaching, 4 units.
  - (d) Teacher's Course in major subject, 2 or 3 units.
  - (e) Electives, 5 or 4 units.

### Group 2—Normal Graduate Group

Must be graduate of a California State Normal School or other accepted Normal school.

1. Bachelor's degree as in Group 1.
2. One-half year (fourteen units) of graduate work.
3. Departmental requirements, as in Group 1.
4. Five units in Education, which must include
  - (a) Secondary Education, 2 units.
  - (b) Teacher's Course in major subject, 3 units.

**Group 3—Experienced Teachers Group**

A. Candidate having taught not less than one year (eight months) with success in any elementary or secondary school.

1. Bachelor's degree as in Group 1.
2. One year of graduate work, as in Group 1.
3. Departmental requirements, as in Group 1.
4. Eleven units in Education, which must include
  - (a) Secondary Education, 2 units.
  - (b) Teacher's Course in major subject, 2 or 3 units.
  - (c) Electives, 7 or 6 units.

B. Candidates who have taught or been engaged in school supervision for not less than twenty months.

1. Bachelor's degree as in Group 1.
2. One-half year of graduate work, as in Group 2.
3. Departmental requirements, as in Group 1.

**Group 4—Special Normal Course Group**

Candidates who desire to spend one-half year at the University and complete their work at a State Normal School offering a special course for college graduates.

1. Bachelor's degree as in Group 1.
2. One-half year of graduate work, as in Group 2.
3. Departmental requirements, as in Group 1.
4. Five units in Education, as in Group 2.
5. One-half year (following the graduate study) in an approved Normal school.

The departmental requirements mentioned above are in addition to the technical requirements laid down by the State Board of Education. The University of Southern California requires as preliminary to any recommendation for the teacher's certificate, the completion of enough work (and of sufficiently high grade) in at least one subject to secure a University recommendation that the candidate is fitted to teach that subject in high school classes. If the candidate's undergraduate preparation in the stated subject has been satisfactory, this may be obtained in the time-limits specified above.

The departmental requirements for such recommendation are stated under their proper headings in the section devoted to "Departments of Instruction."

Departmental Recommendations are also issued in minor subjects as well as in the major subject or subjects. For the minor recommendation the candidate is required to complete satisfactorily six units of graduate or upper division work in that subject. In addition, the candidate must satisfy the University of his general fitness for the work proposed. (Work done to secure such a minor recommendation for teaching may or may not serve toward a minor subject for the degree of Master of Arts according as it is or is not of a purely graduate nature properly prepared for, and in a subject related to the candidate's major work.)

Credit toward the teacher's certificate is given for graduate work done at other universities accredited by the California State Board of Education; provided that, as a rule, at least eight units of the major subject, and two units of the minor work shall be done in residence at this University, and that under such circumstances no recommendation shall be issued without the approval of the department involved.

### **LATE AFTERNOON AND SATURDAY CLASSES**

The University offers special classes, primarily for teachers engaged in active work, on Saturdays and at late afternoon hours. The amount of work that can be done in these courses toward satisfying the requirements for the Departmental Recommendation will depend on the courses offered. More extensive facilities are offered during the six-weeks Summer Session. The University strongly recommends the advantages of a period of daily attendance in the regular University session.



## DEPARTMENTS OF INSTRUCTION

*Lower Division courses are given numbers from 1 to 99; Upper Division courses, 100 to 199; Graduate courses, 200 to 299. Ordinarily students should elect only courses in the divisions in which they are enrolled.*

### AGRICULTURE

The subjects that underlie practical agriculture are taught in the courses listed below. In these may be laid a foundation, broad as the range of practice and interests of the farmer at the present day, and upon which the student may build a career as an agriculturist or develop into a specialist in some one department of that field. For full descriptions of the respective courses, see under the various departments referred to.

**Agronomy.** Essentials of Agriculture. Lectures on methods of cultivation of the different types of soils; effect of tillage; soil hygiene; adaptation to crops; fertility of soils; fertilizers. Two units; first semester. (Geology 108.)

**Soils.** Their origin, composition, and classification (Geology 106). Their cultivation, fertility, and adaptation to crops (Geology 108). Their mineral composition (Geology 2). General Geology (Geology 105).

**Plant Life.** (Botany 1-105a, 107-208.) Especially the relation of plants to their environment of soil, water, physiography, etc. (Botany 3), plant propagation with practice in garden and field (Botany 105a), and economic botany (Botany 105).

**Animal Life.** (Botany 1-210.) Especially the study of orchard, field-crop, and garden pests (Zoology 108).

**Chemical Analysis.** (Chemistry 1-105, 110-112.) Especially analysis of water, soils and fertilizers (Chemistry 110), and of dairy, meat, food and farm products (Chemistry 112).

**Water Supply.** Involving hydraulics and irrigation. (Civil Engineering 109-111.)

**Materials of Construction.** Properties of stones, cements, concrete, timber, etc. (Civil Engineering 13). Reinforced concrete (Civil Engineering 121).

**Sanitation.** Including sanitary science and bacteriology (General Biology 2, 103), the relation of various parasites to disease (Zoology 109), and sanitary engineering (Civil Engineering 112).

**Contracts and Specifications.** Law of contracts in engineering, with study of riparian rights, boundary lines, etc. (Civil Engineering 122).

**Economic Aspects.** Land surfaces, soil, and climate in their relation to industries (Geology 1, 104). Principles of economics, and economic geography (Economics 1, 4). Transportation and communication (Economics 5).

**Miscellaneous Courses.** Land surveying (Civil Engineering 1, 2); light, heat, and electricity (Physics 1-3); shopwork for instruction in the use of wood and metal tools (Physics 4); machine-drawing (Drawing 1-3); road construction (Civil Engineering 119).

**Teachers' Course in Agriculture.** Lecture and field-work, especially adapted to the conditions of the Southwest. (Summer session, Agriculture 1.)

## ART AND DESIGN

W. L. JUDSON, Professor

A. C. WEATHERHEAD, Assistant Professor

AVA C. WELLS, MARION LEAVER, Instructors

QUEEN MASTERS, Assistant

1. **Elementary Drawing** from the antique in charcoal. Open to all students. Two units; either semester. (Weatherhead.)

2. **Advanced Drawing** from the antique. A continuation of Course 1. Two units; either semester. (Weatherhead.)

3. **Still-Life** in charcoal and color. Open to students with two units of drawing. (Weatherhead.)

4. **Drawing of the Figure** in costumed life class. Open to students with two units of drawing. (Wells.)

5. **Elementary Outdoor Sketching.** Pen, charcoal, or brush. Open to all students. First semester. (Weatherhead.)

6. **Advanced Outdoor Sketching.** Pastels, water color, or oil. Open to students with four units of drawing on the recommendation of instructor. Either semester. (Weatherhead.)

7. **Design.** Theory and practice. Open to students on recommendation of the instructor. First semester. (Leaver.)

8. **Poster Design.** Continuation of Course 7. Open to students on recommendation of the instructor. Second semester. (Leaver.)

9. **Clay Modeling.** One unit; either semester. (Wells.)

Notes—Course 1 or its equivalent must precede all other courses.

All students entering drawing courses are required to take six hours a week.

## BIOLOGY

ALBERT B. ULREY, Professor (Zoology)

ANDREW C. LIFE, Associate Professor (Botany)

SAMUEL RITTENHOUSE, Associate Professor (Zoology)

FRANK S. DAGGETT, Lecturer (Animal Distribution)

HARRY S. SWARTH, Lecturer (Animal Ecology)

ELMER HIGGINS, Instructor (Zoology)

E. ROBERT BURNIGHT, DORRIS COOMBER, DORA U. NOBLE,

JULIAN O. WILKIE, STANLEY S. PATTON, Laboratory Assistants

Courses adapted to the needs of students who do not major in Biology but who desire some knowledge of organic nature and training in scientific methods: General Zoology, Bio-nomics and Zoology 108, or Botany 1 and 2 or 4.

Courses affording preparation for directors of Physical Education and Health and Development: Zoology 1-3; 104-107; General Biology 1-3a; 104.

Courses preparing for Agriculture: Zoology 1-3; 104-109; Botany 1-5; 105, 107, 108; General Biology 1-3; 104; certain courses in Chemistry, Physics and Geology; general studies required in the course to be pursued. The equipment of the department is described on pages 172-175.

## **Zoology**

### LOWER DIVISION COURSES

1. **General Zoology.** This course is designed to give a general knowledge of the animal kingdom and an introduction to more advanced courses in biology. In the laboratory each student studies with the microscope, or dissects, typical animals selected from the different groups from the simple to the more complex forms. The lectures co-ordinate the laboratory work, show the natural relationships of animals and explain the general problems of biology. Four units; throughout the year. (Rittenhouse, Higgins.)

2. **Physiology.** Lectures and laboratory work on the activities of living organisms. Special study of the physiology of the human body. Prerequisites, course 1 or Botany 1. Three units; second semester. (Ulrey and Assistant.)

### UPPER DIVISION AND GRADUATE COURSES

103. **Systematic Zoology.** The course deals with certain groups of vertebrates with reference to (a) taxonomy and bibliography of some group; (b) ecology, giving particular attention to the animal in its usual environment. Laboratory study with field work and lectures. Two units; first semester. (Swarth, Ulrey, Daggett.)

104. **Histology.** This course gives the student an opportunity to study the chief tissues of the mammalian body; and to learn the methods of preparation of tissues, with practice in cutting, staining and permanently mounting sections. Laboratory work and lectures. Prerequisite, course 1. Three units; first semester. (Rittenhouse.)

**105. Embryology.** A course which deals primarily with the study of the development of the hen's egg and the formation of the organs in the embryo chick. In the laboratory the student learns to make his own serial sections. The lectures include the general problems of comparative embryology, with special application to the chick and the frog. Prerequisites, courses 1 and 104. Three units; second semester. (Rittenhouse and Assistant.)

**106. Comparative Anatomy of Vertebrates.** The laboratory work consists of dissection of the main types of the vertebrate animals, and a study of the relationships of the different systems of organs. The lectures deal with a comparative study of the organs of the vertebrate body, especially from the standpoint of development. Prerequisites, courses 1, 104 and 105. Three units; first semester. (Rittenhouse.)

**107. Mammalian Anatomy.** The course consists of a careful dissection and study of type mammals, especially the rabbit, cat and dog; with collateral reading in human anatomy. In the lectures special attention is given to the nervous, blood and skeletal systems, including an outline of their development. Prerequisite, course 1. Three units; second semester. (Rittenhouse.)

**108. Economic Entomology.** A study of orchard, field crop, and garden insect pests, the forest insects and household visitors. Consideration is given the control and eradication of insect depredations, the composition and application of insecticides, and farm management to eliminate injurious insects. Lectures and laboratory work. Prerequisite, course 1 (or an equivalent amount of Botany together with the insect aspects of course 1). Three units; second semester. (Rittenhouse.)

**109. Parasitology.** The organization, life history, and evolution of parasites; the protozoa and their relation to disease; the role of insects, ticks, and mites in the transmission and propagation of disease, together with their control as a phase in medical entomology; and a study of helminthes and



larger parasites. Lectures and laboratory work. Prerequisite, course 1 (or equivalent in Botany) and General Biology 3 (Bacteriology). Three units; first semester. (Rittenhouse.)

**110. Special Zoology.** An investigation of some topic of limited scope. This course is planned to meet the needs of each student prepared to pursue it. Six hours per week, throughout the year. Prerequisites, courses 1, 2, 3, 4, and 5, or their equivalent. Three units; throughout the year (Ulrey).

**Major Work in Zoology.** Courses 1-2; 103-106; General Biology, courses 103, 104, and 106.

**Minor Work in Zoology.** Zoology 1 and General Biology 103.

**High School Teachers' Recommendation in Zoology:** 1, General Zoology; 2, Physiology; 103, Systematic Zoology; 106, Anatomy of Vertebrates. General Biology: 1, Personal Hygiene; 2, Sanitary Science; 103, Bacteriology; 104, Bionomics.

## **General Biology.**

### LOWER DIVISION COURSES

**1. Personal Hygiene.** Lectures and recitations on the preservation and improvement of health. The course deals with the functions and care of the body with a view to attaining the greatest possible degree of efficiency. Open to all students. Two units; first semester. (Ulrey.)

**2. Sanitary Science.** A course of lectures on public hygiene. The study includes (1) the nature of infectious diseases, their dissemination and control; (2) the problems of water supply and sewage; (3) the distribution and care of foods in relation to this public health; (4) sanitary surveys of residences, resorts, and public buildings; (5) the various agencies for the federal, state and municipal supervision of public health. Two units; second semester. (Ulrey.)

**3. Principles of Biology.** A lecture course on the general principles of Biology. Elective for students who have no zoology or botany, but wish some knowledge of animal and plant life. Two hours per week; second semester. (Ulrey.)

UPPER DIVISION COURSES

**100. Heredity.** An introductory course on heredity dealing with the physical basis of inheritance, the laws of variation and heredity, their application to economic and social problems. Two units; first semester. (Ulrey.)

**101. History of Biology.** This course traces the development of biology and brings out the chief contributions made to the science by the great naturalists from Aristotle to the present time. Lectures, collateral reading and papers. Prerequisite, Course 1. Two units; second semester. (Rittenhouse.)

**103. Bacteriology.** A study in the laboratory and by means of lectures of the nature of the bacterial organism; its relation to disease; methods of cultivating and isolating it; inoculation experiments; staining of sections; examination of water; etc. Prerequisite, Botany 1 or Zoology 1. Three units; first semester. (Ulrey.)

**104. Bionomics.** A course of lectures dealing with the fundamental principles of Biology. The problems of inheritance, development, and sex are considered from the cytological standpoint throughout the first semester. Variation, heredity, selection, regeneration, and kindred topics are studied during the second semester. Prerequisite, General Zoology or General Botany. Two units per week; throughout the year. (Ulrey.)

**105. Microscopical Technique.** A course dealing with special methods of Microscopy. Laboratory work and lectures. Two units; either semester. (Ulrey.)

**106. Seminar.** The advanced students and instructors of the department meet for reports on special investigation and present-day problems of biology. One unit; throughout the year. (Ulrey, Rittenhouse.)

**107. Journal Club.** Reports on the current literature of Biology. One unit; throughout the year. (Ulrey.)

### **At the Venice Marine Station**

Primarily for Graduate Students

**208. Biological Survey.** A study of the marine animals and plants of the region, including their habitat, classification, distribution, and life habits. (Ulrey, Rittenhouse.)

**209. Experimental Biology.** The course consists of a study of some special problem of biology for which the student's training prepares him. (Ulrey, Rittenhouse.)

**210. Research.** A limited number of private laboratories are available for free use by investigators who are prepared to carry on such work. Investigation may be carried on throughout the year. Application for these privileges should be made to the director of the station. (Ulrey, Rittenhouse.)

**Summer Course.** The course consists of a study of Marine Biology in connection with the explorations carried on by the use of the station launch, the Anton Dohrn. The work is given at the laboratories of the Venice Marine Biological Station. Formal instruction is given only during the regular summer session of the University.

## **Botany**

### **LOWER DIVISION COURSES**

**1. General Botany.** The course comprises a study of typical plants representing the vegetable kingdom. The general morphology and structure of types of thallophytes.

archegoniates, and spermatophytes are studied. Attention is also given to habitat, environment, and general physiological processes, and the agricultural phases of plants. Laboratory study, field work, and lectures. Four units; throughout the year. (Life, and assistants.)

**2. Field Botany and Taxonomy.** A study of flowering plants (spermatophytes) in the local flora. The course deals with habitats, pollination, and the relationship of plants. Lecture and six laboratory hours per week, one semester. Three units; either semester. (Life.)

**3. Ecology.** The relation of plants to their environment of soil, water, physiography, etc., and their structural adaptations. Especially suited to agricultural students. Lectures, field and laboratory work. Prerequisite, course 1. Two units; second semester.

**4. Plant Physiology.** Experimental work on the physiology of plants; lectures and supplementary reading. This course includes general experiments on the work and processes carried on by living plants, and experiments on the fundamental processes with precise recording apparatus. Prerequisite, course 1. Three units; first semester. (Life.)

#### UPPER DIVISION COURSES

**105. Economic Botany.** This course deals mainly with the parasitic fungi, their structure, dissemination and relation to cultivated plants; also other economic phases of plants are given attention in the course. One lecture and three laboratory hours per week. Two units; either semester. (Life.)

**105a. Plant Propagation and Genetics.** A study of the principles of plant propagation with some practice in garden and field; also problems of variation and heredity in relation to phylogeny and the improvement of plants. Lectures, quizzes, and field work. Two units; second semester. (Life.)

**106. Teachers' Course.** A series of experiments and exercises on the growth, structure, economic bearing and propagation of plants. The place of Botany in the high school curriculum and the principles that determine the selection, organization, and use of botanical materials in the high school are discussed. Two units; first semester. (Life.)

**107. Plant Anatomy and Histology.** The minute structure of the systems and tissues. Microscopical technique in preparing permanent mounts. Laboratory work and lectures. Prerequisite, course 1. Two units; either semester. (Life.)

**208. Marine Algae.** The morphology, classification, and ecology of the marine flora, including collecting, mounting, and preserving the algae of the adjacent coast. Three units; either semester. (Life.)

**209. Advanced Botany.** Special problems in advanced study of plants for which the student is fitted by previous training. Three units; either semester. (Life.)

**210. Botanical Journal Club.** One unit; throughout the year. (Life.)

**Major Work in Botany.** Courses 1-5, upper division courses, eight units; General Biology 3, Bacteriology.

**Minor Work in Botany.** Botany 1, 2 and 4.

**High School Teachers' Recommendation in Botany:** 1, General Botany; 2, Field Botany and Taxonomy; 4, Plant Physiology; 105, Economic Botany; 105a, Plant Propagation and Genetics; 106, Teachers' Course; 107, Plant Anatomy and Histology, or 208, Marine Algae. General Biology: 3, Bacteriology; 104, Bionomics.



## CHEMISTRY

LAIRD J. STABLER and LEROY S. WEATHERBY, Professors  
EDWIN F. RATHJEN and RALPH T. GOODWIN, Instructors;  
GEORGIANA E. QUICK, Storekeeper; CLAUD E. SWIFT, GRACE  
ASHMORE, LELAND L. REBBER, HUGH J. MULTER, Laboratory Assistants.

### LOWER DIVISION COURSES

Students without entrance credit in Chemistry should register in courses 1 and 1a; those with entrance credit should register in 2 and 2a. Courses 2, 2a, 3 and 3a are prerequisite to all later courses in chemistry and comprise the required work in the engineering courses.

**1. General Inorganic Chemistry.** A lecture and recitation course, covering the principles of inorganic chemistry. Open only to students who do not present entrance credits in chemistry. To be accompanied by course 1a. Three units; first semester. (Rathjen.)

**1a. General Inorganic Chemistry.** A laboratory course to accompany course 1. Six periods a week in the laboratory. Two units; first semester. (Rathjen.)

**1s. Elementary Organic, Food, and Textile Chemistry.** Lectures and recitations introducing the composition and the chemistry of the simple fundamental organic compounds, especially those related to daily life. The course includes a special study of foods and food values, fuels, fabrics, dyes, perfumes, poisons, adulterants, natural and artificial coloring compounds, and kindred topics. It is recommended to all non-technical students and is open to all who have had entrance chemistry or courses 1 and 1a.

(It is advised that students desiring this course who have had entrance chemistry, register the first semester in courses 2 and 2a.)

To be accompanied by course 1s.a. Three units; second semester. (Weatherby.)

**1s.a. Elementary Organic, Food, and Textile Chemistry.** A laboratory course accompanying and supplementing the work of course 1s. Six periods a week in the laboratory. Two units; second semester. (Goodwin.)

**2. Inorganic Chemistry.** Non-metals. Lectures and recitations with classroom demonstrations. Especial emphasis is placed on the principles and laws of inorganic chemistry, and their application in analytical work. To be taken in connection with 2a. Three units; first semester. (Weath-erby.)

**2a. Qualitative Analysis. Metals.** A laboratory course covering the reactions of the salts of the metals in known solutions, and the separation and identification of the same in unknown mixtures; the analysis of metals, amalgams, and alloys. Six hours a week in the laboratory. Two units; either semester. (Goodwin.)

**3. Inorganic Chemistry.** Metals. Lectures and recitations on the metals and metalloids, and their chief compounds, with especial reference to their technical value and commercial use. To be taken in connection with courses 2a or 3a. Three units. Second semester. (Rathjen.)

**3a. Qualitative Analysis.** Non-metals. A laboratory course covering the reaction of the salts of the non-metals and their identification, and the complete analysis of simple and complex salts, ores, and commercial products. Six hours a week in the laboratory. Two units; second semester. (Rathjen.)

**4. Quantitative Analysis.** Laboratory practice in gravi-metric and volumetric determinations, with occasional lec-tures and recitations. Nine hours per week in the laboratory. Three units; throughout the year. (Stabler.)

#### UPPER DIVISION AND GRADUATE COURSES

**105. Advanced Qualitative Analysis.** A laboratory course involving difficult qualitative separations and the detection of

some of the rare elements. Weekly lectures and discussions. Three units; either semester. (Stabler.)

**106. Inorganic Preparations.** A laboratory course, including the preparation of inorganic compounds, with tests for purity and strength. Prerequisite, course 4. Two units; either semester. (Stabler.)

**107. Organic Chemistry.** Lectures and recitations on the chemistry of the carbon compounds. Two units; throughout the year. (Weatherby.)

**107a. Organic Preparations.** A laboratory course in the preparation of typical carbon compounds in both the aliphatic and the aromatic series, to accompany course 107. Two units; throughout the year. (Weatherby.)

**107b. Organic Preparations—Advanced.** A laboratory course in the preparation of higher organic compounds, with supplementary reading on theory and methods. An extension of course 107a. Either or both semesters. (Weatherby.)

**108. Mineral Analysis.** Gravimetric and volumetric analysis of representative minerals, ores, and alloys. Prerequisite, course 4. Three units; either semester. (Stabler.)

**109. Physical Chemistry.** A lecture course on the fundamental principles and laws of chemistry. A general study of electro-chemistry is included in the work of the second semester. Two units; throughout the year. (Weatherby.)

**109a. Physical Chemical Measurements.** A laboratory course to accompany or follow course 109. Three hours of laboratory work a week. One unit; throughout the year. (Weatherby.)

**109b. Physical Chemical Measurements—Advanced.** A laboratory course with supplementary reading. An extension of the work of 109a. Either or both semesters. (Weatherby.)

**110. Chemistry of Agricultural Products.** A lecture course involving a critical study of soils, fertilizers, irrigation waters, and agricultural products. Should be accompanied or followed by course 110a. One unit; first semester. (Stabler.)

**110a. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, and similar substances. Prerequisite, course 4. Three units; either semester. (Stabler.)

**111. Medical Chemistry.** A laboratory course, including urine analysis, toxicology, and assay of pharmaceutical products. Designed especially for students looking forward to medicine or pharmacy. Open to students who have completed or are taking courses 4 and 107. Three units; either semester. (Stabler.)

**112. Food Analysis.** A laboratory course in the quantitative determination of the composition of food products and in the detection of food preservatives and adulterants. Open to students who have completed courses 4 and 107. Two units; either semester. (Stabler.)

**113. Industrial Chemistry.** A lecture course covering the chemistry involved in the manufacture of commercial products. Lectures will be given by chemists from various manufacturing establishments. Open only to those who have completed, or are taking, course 107. One unit; second semester. (Stabler.)

**113a. Oil and Gas Analysis.** A laboratory course in commercial oil and gas analysis. A special oil laboratory is equipped for handling crude petroleum on a basis commensurate with commercial practice. Prerequisites, courses 4 and 107. Two units; second semester. (Stabler.)

**114. Assaying.** This course comprises silver and gold extraction by scorification and crucible methods; the fire assay of copper, lead, and tin; and the extraction of gold from ores by the amalgamation, the chlorination, the cyanide, and

the electrolytic processes. Prerequisite, courses 4 and 108. Two units; second semester. (Stabler.)

**215. Seminar.** Papers and discussion on assigned topics, with lectures on subjects of general chemical interest. One unit; both semesters. (Stabler, Weatherby.)

**216. Research.** Research work, under the direction of the department, may be pursued by candidates for the degree of Master of Arts, in either pure or applied Chemistry. (Stabler, Weatherby.)

**217. Teacher's Course.** A study of the teaching of chemistry in secondary schools. One unit; throughout the year. (Weatherby.)

**Fees:** In all laboratory courses a fee of eight dollars each semester is required. A deposit of seven dollars is required to cover the value of apparatus used, of which the balance, less breakage, is returned at the end of the year. In course 14 a deposit of ten to thirty dollars is required to cover the cost of material consumed.

**Major Work:** Those majoring in Chemistry are advised to take courses 2, 2a, 3, 3a, 4, 106, 107, 107a, 109, 109a, 110, 113, 215, and at least ten additional units from the special analytical courses. The minimum requirement is thirty semester units subsequent to courses 1 and 1a.

**Minor Work in Chemistry:** The minimum requirement is fifteen units subsequent to courses 1 and 1a. This requirement should be met by courses 2, 2a; 3, 3a; and either 1s and 1s.a, or course 4.

**High School Teachers' Recommendation.** 2, 2a, 3, 3a, Inorganic and Qualitative Analysis; 4, Quantitative Analysis, 107, 107a (or 1s and 1s.a), Organic, 109, 109a, Physical; 215, Seminar; 217, Teachers' Course; and at least two units from the advanced analytical courses.



**DRAWING**

A. W. NYE, C. W. LAWRENCE, Professors  
A. WEATHERHEAD, Assistant Professor

1. **Elementary Mechanical Drawing.** Lettering, geometric problems, orthographic projection, development, and intersection. Six hours, two units; first semester. (Weatherhead.)

2. **Advanced Mechanical Drawing.** Isometric projection, tinting, shades and shadows, and machine drawing. Six hours, two units; either semester. (Weatherhead.)

3. **Elements of Practical Perspective.** Six hours, two units; second semester.

4. **Machine Drawing.** Drawing details, and assemblies of machine parts from sketches made in the laboratories or from blue prints. Designing simple machines. Lectures and drafting. Four hours, two units; first semester. (Weatherhead.)

An examination in orthographic projection will be given to all students entering this course.

5. **Technic of Drawing.** The technical details of drafting in connection with steel construction, topographical mapping, electrical diagrams, curved shading, etc. Four hours, two units; second semester. (Weatherhead.)

6. **Descriptive Geometry and Stereotomy.** Advanced study of the representation of lines, surface and solids, shades and shadows, from a mathematical standpoint; linear perspective and stereotomy. Four hours, two units; throughout the year. (Weatherhead.)

Text, Descriptive Geometry. Moyer.

7. **Machine Design.** Advanced course in mechanical and electrical design, detailing, working drawings of complicated machine details, study of standard commercial machine parts, shop practice, strength of parts, use of tables, formulae, slide rule, gearing, estimating, specifications, structural iron and steel. Three units; second semester. (Nye.)

**100. Graphic Statics.** The graphical determination of stresses in engineering structures. See Civil Engineering 115. Four hours, two units; first semester. (Lawrence.)

**101. Structural Design.** Complete designs for steel bridges, roofs, and other structures. See Civil Engineering 118. Seven hours, three units; throughout the year. (Lawrence.)

## ECONOMICS

ROCKWELL D. HUNT, Professor; OLIVER J. MARSTON, Associate;  
KENNETH WALLACE and FORBES LINDSAY, Lecturers.  
CLOYD H. MARVIN, Instructor

### LOWER DIVISION COURSES

**1. Principles of Economics.** A comprehensive introduction to economic studies, based upon a recent text, lectures, assigned readings, and student exercises. The elements of economic life, and the principles and problems of Production, Distribution, and Consumption, with particular reference to American conditions. Three units; throughout the year. (Hunt and Marvin.)

**Note**—Economics 1 is recommended to students taking the six hours requirement (History or Economics) in this department. It is in general prerequisite to all other courses in Economics.

**2. Money, Credit, and Banking.** The origin and evolution of money, with special attention to the problems of metallic and paper money; the history and theory of banking, with examination of leading systems and special problems. Three units; first semester. (Marston.)

**3. Public Finance.** A study of budgetary science, the principles and practice of taxation, public expenditures, and financial administration. Much attention is given to federal, state, and local taxation in the United States. Three units; second semester. (Marston.)

**4. Fiscal and Industrial History of America.** A comprehensive survey of American economic development and of

national legislation in the fields of currency, finance, and the tariff, studied in relation to the evolution of commerce and industry. The use of texts and extended readings. Two units; first semester. (Marston.)

**5. Economic Geography.** A survey of the history and present status of industry and commerce in the principal countries; study of natural advantages in the world market, and of national policies in development of resources, with special attention to the United States. (Same as Geology, 104.) Two units; second semester. (Bailey.)

#### UPPER DIVISION COURSES

**101. Municipal Problems.** The rise and growth of the modern city. Chief emphasis is placed on American municipal government. Economic, administrative, and social problems are considered. The regular work of the class is supplemented by a series of special lectures by leading practical experts. Three units; first semester. (Hunt.)

**102. Labor Problems.** The important labor problems of the day, with special reference to American conditions. The history and problems of labor organizations, strikes and lock-outs, industrial arbitration, profit-sharing, woman and child labor, etc. Three units; second semester. (Hunt.)

**103. Immigration.** A study of the general causes of immigration, the European backgrounds of immigration to the United States, and the problems of economic and social adjustment, with special reference to present-day conditions. Same as Sociology, 103. Three units; first semester. (Bogardus.)

**104. Corporations.** Causes, growth and forms of corporations; their promotion, financiering, incorporation, capitalization and consolidation. The analysis of reports, stock speculation, receiverships and reorganizations. Social and political effects; the position and relation of stockholders and directors. Two units; first semester. (Marston.)

**105. Transportation and Communication.** The theory and history of transportation; the development of the railroad, its organization, management, and consolidation. Ocean and inland waterways. Problems of rebates, public regulation, etc. Postal service and express companies. Two units; second semester. (Marston.)

**106. Commercial Organization.** After giving attention to the leading extractive industries, such as agriculture, mining and forestry, special studies are made in certain industries, each student being required to study intensively some one field and present a report. Special problems include population, marketing, business organization and industrial finance. Two units; first semester. (Wallace.)

**107. Business Administration.** An examination of the principles underlying the modern organization of business, internal, as applied to the production end, and external, as applied to the distribution end of business. Methods of business administration, with application of the principles of scientific management to institutions outside of ordinary business, as city government, schools, churches, etc. Two units; second semester. (Wallace.)

**108. Socialism.** It is the aim of this course, after giving attention to the earlier history of communistic and socialistic theories and movements, to examine the underlying causes of the modern socialistic movement, study various schools of socialistic thought, and present a critical estimate of socialism as a philosophy of economic evolution and as a program of social reform. Two units; first semester. (Hunt.)

**109. The Liquor Problem.** After a brief consideration of its physiological and psycho-physical aspects, attention will be devoted to the economic aspects and social phases of the drink problem, with special references to American conditions. Discussion of pathological conditions will be followed by an examination of leading proposals for control or elimination. Open to sophomores. One unit; throughout the year. (Hunt.)

**110. Life Insurance.** A comprehensive lecture course on the theory and practice of Life Insurance, with special attention to the concrete problems involved. Collateral readings and student exercises. Open to Sophomores. Two units; throughout the year. (Lindsay.)

#### GRADUATE COURSES

**200. Seminar.** The Seminar is designed to meet the needs of graduate students of the department; for the present it may include also a limited number of senior undergraduates. In addition to the leading reports, which are based upon original investigation, attention is given to the reviewing of recent books and periodical literature and to topics of contemporaneous interest. Two units; throughout the year. (Hunt.)

**201. History of Economic Thought.** The development of economic thought from classical antiquity, with discussions of the different schools of economics. Extensive readings from numerous writers, with reports by the students. Two units; throughout the year. (Hunt.)

**202. Recent Economic Theory.** A comparative study of the theories of leading contemporaneous economists and the tendencies of the present day, with special reference to the problems of value and the distribution of wealth. Two units; throughout the year. (Not given during 1916-17.) (Hunt.)

**Major Work in Economics:** Thirty semester units.

**Minor Work in Economics.** Eight units in addition to course 1, at least five of which must be in upper division courses.

**High School Teacher's Recommendation:** 1, Principles; 2, Money and Banking; 3, Public Finance; 101, Municipal Problems; 102, Labor Problems; 104, Corporations, and 105, Transportation, or 106 and 107, Commercial Organization and Business Administration; 200, Seminar; 201, History of Economic Thought, or 202, Recent Economic Theory; six units of additional approved work.



## EDUCATION

THOMAS B. STOWELL, Professor

HOWARD L. LUNT, Associate Professor

ELIZABETH YODER, Assistant Professor

JEREMIAH B. LILLARD and ELSA H. HORSTMANN, Lecturers

1 and 2. **Fundamental Psychology.** See Philosophy 1 and 2. Six hours; two semesters.

103. **Principles of Education** (including General Method). A study of psychological and educational principles which underlie the work of teaching. It considers primarily the psychology of the acts of teaching; secondly, the nature of the subject-matter to be learned; thirdly, how the mind of the teacher adjusts the mind of the learner to the task set, and thereby constructs the art of teaching.

A limited number of psychological experiments illustrative of the matter under consideration is followed by discussions of their respective educative values. Lectures, discussions, collateral readings, papers. Textbook—Horne's "Psychological Principles of Education." Prerequisite, courses 1 and 2. Open to upper division and to graduate students. Three units; first semester. (Stowell.)

104. **Principles of Secondary Education.** (3 continued.) Its foundational principles; the social and the individual bases. The organization of the school curriculum; schemes advocated; typical recitations, programs, etc. Lectures, readings, reports. Three units; second semester. (Stowell.)

105. **History of Education: Ancient and Mediaeval.** Beginning with the earliest periods and extending to the period of the Reformation. A study of the development of educational ideals and systems with special reference to the agencies that have been operative in their evolution. Lectures, collateral readings, papers. Monroe's "Text-Book in the History of Education." Open to upper division and to graduate students. Three units; first semester. (Stowell.)

106. **History of Education: Modern** (5 continued). From the Reformation to the present, with a critical study of edu-

cational classics, especially the contributions of Comenius, Locke, Rosseau, Basedow, Pestalozzi, Herbart, Froebel, Spencer, and contemporary educators. Three units; second semester. (Stowell.)

**107. Aesthetics** (See Philosophy 108). This course considers the psychology of Aesthetics; the principles controlling the expression of beauty and their application to the Fine Arts; and a brief history of the Arts with special reference to their importance and effectiveness as educating agencies. Lectures, readings, observations, reports. Two units; first semester. (Stowell.)

**108. School Organization, Administration, Supervision, and Management.** A study of the problems of school supervision. It considers the problems of the organization and administration of public schools. Lectures, discussions, readings, observations, reports. Textbook—Arnold's "School and Class Management." Open to upper division and to graduate students. Two units; second semester. (Stowell.)

**108a. School Organization.** An advanced study of problems which especially concern principals and superintendents. This course presupposes considerable school room experience. Two units; second semester. (Lillard.)

**109. Education of Exceptional Children.** A historical and critical survey of the methods employed in the education of the blind; of the deaf and dumb; of those defective in speech; of the feeble-minded; of abnormal and backward children; of the ethically defective; of epileptics; the care of neglected and dependent children. This course is articulated with Sociology 2, q.v. Observations, reports, readings, discussions. Open to upper division and to graduate students. One unit; first semester. (Lunt.)

**112. Interpretation and Expression.** Lectures on methods in the interpretation of literature; the psychology of expression; oral practice of selections from masterpieces; the technique of voice. Open to graduates who are candidates for the teacher's certificate. One unit; first semester. (Yoder.)

**113. Interpretation and Expression.** Continuation of 112. One unit; second semester. (Yoder.)

**114. Principles of Sociology.** See Sociology 2. Three units; first semester. (Bogardus.)

**120. Immigration.** See Sociology 3. Three units; second semester. (Bogardus.)

**121. Religious Education.** See Religious Education 120, 121. Two units; throughout the year. (Montgomery.)

**122. Current Problems in Education.** A study of existing systems of education with special reference to the underlying industrial and social forces that have determined their development. This course will discuss vocational education and its relation to liberal education; continuation schools; special schools; vocational guidance, etc. It will consist of lectures, discussions, and reports upon the various phases of modern educational theory and practice, with a detailed study of typical schools. Summer session; two units. (Lillard.)

**200. Philosophy of Education.** An advanced course in educational theory. It investigates the nature of the psychic activities which make education possible and desirable; the essential nature of the educating process and its limitations; the actual development of this process as seen in the various civilizations. Lectures, discussions, critical study of educational sources. Textbook—Rosenkranz's "Philosophy of Education." Prerequisite, courses 1, 2, 103-106. For graduate students. Three units; first semester. (Stowell.)

**201. Philosophy of Education.** An advanced course in educational theory. The possibility of education, its pre-suppositions, its place in human experience, its end; the science, its basis, its certitude; the philosophy of education, the sources of its materials; the meaning of institutions, their contributions to the philosophy of education; a liberal education, its essence, its efficiency; culture, its characteristics, its relation to the curriculum; the tests of college efficiency. Lectures, discussions, readings, papers. Primarily for graduate students. Three units; second semester. (Stowell.)

**202. Practice in Teaching.** The University High School, located on the University Campus, furnishes rare facilities for observation and for actual experience in handling and giving instruction to classes in Secondary Education. Five hours; one semester.

**203. Secondary Education.** This course considers the origin, growth, organization, administration, supervision, and management of the American high school; the modern conception of its relation to the elementary school, to higher institutions of learning, and to the community; formal discipline, adolescence, moral education, vocational education, social organizations, and the curriculum.

It is designed primarily to meet the needs of candidates for the high school certificate. Two units. (Lillard.)

**For Special Courses in Education,** see the several departments, as follows:

Teachers' Course in Botany, see Botany 106.

Teachers' Course in Chemistry, see Chemistry 217.

Teachers' Course in English, see English 295.

Teachers' Course in French, see French 111.

Teachers' Course in German, see German 211.

Teachers' Course in History, see History 220.

Teachers' Course in Latin, see Latin 113.

Teachers' Course in Mathematics, see Mathematics 210.

Teachers' Course in Physics, see Physics 206.

Teachers' Course in Spanish, see Spanish 214.

**Special Summer Courses** will be offered in Education; see Announcement of the Summer School.

## **ENGINEERING COURSES ELECTIVE IN ARTS**

The following courses in engineering are open to students in the College of Liberal Arts, but not more than a total of 18 units may be counted toward the degree of Bachelor of Arts. These courses may also be offered by engineering

students seeking credit in the department of Liberal Arts, but in such transfer of credits not more than 18 units will be accepted for any one semester's work.

	Units
Drawing (4 and 5).....	4
Descriptive Geometry (Drawing 6).....	4
Surveying (C. E. 1 and 2).....	6
Analytical Mechanics (C. E. 107).....	5
Sanitary Engineering (C. E. 112).....	2
Materials of Construction (C. E. 13).....	3
Dynamo Machinery (E. E. 101ab).....	10
Dynamo Laboratory (E. E. 102).....	2
Steam Engineering (E. E. 4 and 5).....	4
Alternating Currents (E. E. 103a).....	5

## ENGLISH LANGUAGE AND LITERATURE

ALLISON GAW, PAUL S. WOOD, BENJAMIN F. STELTER, JAMES  
 MAIN DIXON, Professors  
 ELIZABETH YODER, Associate Professor  
 HUGH C. WILLETT, Principal of University High School  
 M. PAULINE SCOTT, Assistant Professor  
 JAY CHESNUTT, MARYETTE G. MACKEY, Instructors  
 MARY EMMA COULTER, Assistant

**1. Introductory Course.** Practice in composition, based upon a study of representative works in English literature. Required of all candidates for the bachelor's degree. Three units; throughout the year. (Gaw, Wood, Stelter, Scott, Chesnutt.)

**1b.** Training in spelling and punctuation; for students failing to pass a test in those subjects. No credit is given for 1b, but it must be passed before a student receives credit for English 1. One hour; each semester. (Coulter.)

**20. General History of English Literature.** Required of all students intending to do major work in English, and in general prerequisite to all courses in literature above Sophomore grade. Three units; throughout the year. (Stelter, Scott.)



**50. Masterpieces of English Literature.** An introduction to the study of literature, with emphasis upon the various literary types in prose and verse. Two units; throughout the year. (Wood.)

**63. Studies in the Modern Novel.** An analytical study of representative English, French and Russian novels. The work of the first semester is mainly concerned with the romance of action; that of the second with the novel of character. Two units; throughout the year. (Wood.)

**99. Public Lecture Course. Modern Plays.** Readings and interpretations of recent dramas. One unit of credit, granted upon passing an examination on the lectures and required reading, will be given to regular undergraduate students above Freshman grade. Open to the public without charge. Thursday, 2:10. One unit; second semester. (Gaw.)

#### UPPER DIVISION COURSES

**Note**—Many of the following courses may also, under certain conditions, be elected by graduate students for graduate credit; but such arrangement is invariably dependent upon the details of the student's previous preparation and upon the satisfactory completion of a piece of research in addition to the regular work of the course. For the possibility of such adjustment in any given case the student will consult with the head of the department.

**103. Advanced Composition.** Narrative and descriptive writing; the short-story. The class is limited to fifteen persons, of whom a small proportion may be sophomores. Prerequisite, a high grade in English 1. Two units; second semester. (Wood.)

**110. Introduction to the Study of Language.** The progressive and conservative forces entering into linguistic evolution and differentiation; the relations of English to the other members of the Indo-European group; the general history of the English language in England. Open to Sophomores with adequate preparation. Three units; second semester. (Gaw.)

**112. Old English.** A study of the grammar and phonology of West Saxon English prior to the Norman Conquest, with emphasis upon its relations to the English of today. Required of all English majors. Three units; throughout the year. (Gaw.)

**121. The Early English Period.** A study of English literature from its origins to 1066. Prerequisite, English 112. Not offered, 1915-1916. Three units; second semester. (Gaw.)

**122. Beowulf.** A reading of selected passages, with critical comment. The course is primarily literary, not philological. Prerequisite, English 112. Not offered, 1915-1916. Two units; second semester. (Gaw.)

**126. The Period of Chaucer.** A survey of Chaucer's life and times; readings principally in the "Canterbury Tales" and "Troilus and Cressida." Three units; second semester. (Stelter.)

**129. Non-Dramatic Literature of the Elizabethan Period.** 1557-1660. A study of the principal authors and types of non-dramatic literature of the period. Chief attention is given to Spenser. Two units; first semester. (Stelter.)

**Note—For Elizabethan Dramatic Literature** see courses 154, 154b, 154c, and 156.

**133. The Period of Milton.** Milton's poetry and most important prose. Selections from the Church poets, Cavaliers, and prose writers of the period. Three units; second semester. (Stelter.)

**135. The Classical Period.** 1660-1760. The rise, culmination, and decline of the neo-classical spirit in English literature. Not offered, 1915-1916. Three units; second semester. (Wood.)

**137. The Romantic Period.** 1760-1832. Chief attention is given to Wordsworth, Coleridge, Byron, Shelley, and Keats. Three units; first semester. (Stelter.)

140. **The Victorian Period.** 1832-1892. The prose and poetry of the last two-thirds of the nineteenth century. Three units; second semester. (Wood.)

143. **Contemporary British and American Poets.** A consideration of the chief writers of verse in the English language since the death of Tennyson. Two units; second semester. (Wood.)

145. **American Literature.** A survey from the beginnings in the colonial period to the present day. Three units; first semester. (Wood.)

149. **Scottish Literature.** A survey from the fourteenth to the nineteenth centuries; with readings in Barbour's "Bruce," the "Kingis Quair", Dunbar, Douglas, Ramsay, Ian Maclaren and Barrie. Two units; second semester. (Dixon.)

154. **Shakespeare.** Analytical study of a series of Shakespeare's plays in chronological order, in the light of English dramatic history and the contemporary social conditions. Not offered, 1915-1916. Three units; first semester. (Gaw.)

154b. **Shakespeare's Historical Plays.** For descriptions of this course see Department of History, course 102. Two units; one semester each course. (Dixon.)

154c. **Shakespearean Tragedy.** A detailed study of four of Shakespeare's tragedies. Prerequisite, course 154. Two units; first semester. (Stelter.)

156. **The English Drama Before 1642, Exclusive of Shakespeare.** The development of drama from its origins in the church liturgy to its suppression by the Puritans. Not offered, 1915-1916. Three units; second semester. (Gaw.)

158. **The Modern Drama.** The history of the English drama from 1660 to the present day, with especial emphasis upon the influence of Ibsen. Two units; throughout the year. (Gaw.)

**160. The English Lyric.** A study of the lyric as a form, with a survey of the leading types in English. Not offered, 1915-1916. Two units; one semester. (Stelter.)

**166. The English Essay.** A study, historical and critical, of the essay as a literary form from Bacon to the present time. Offered, summer session of 1915. Two units; one semester. (Stelter.)

**177. Bunyan.** A study of the life and works of the Puritan allegorist and idealist. Two units; first semester. (Dixon.)

**180a. Burns.** A study of the central figure of modern Scottish lyrical poetry and his literary environment. Two units; second semester. (Dixon.)

**181. Studies in the Romantic Poets.** Prerequisite, English 137. Two units; throughout the year. (Stelter.)

**182a. Scott as an Historical Novelist.** Special attention is given to "Old Mortality", "Rob Roy", "Waverley", and "Guy Mannering." Not offered, 1915-1916. Two units; one semester. (Dixon.)

**183a. Tennyson.** The poet as lyrist and as interpreter of his age, with special attention to "In Memoriam." Two units; second semester. (Dixon.)

**183c. Browning.** A study of the art and teaching of Robert Browning, with especial attention to "The Ring and the Book." Three units; first semester. (Wood.)

**183e. Matthew Arnold.** The poet and critic as the exponent of Oxford ideals; humanist, elegiast, Neo-Hellenist. One unit; second semester. (Dixon.)

**184a. Carlyle.** His influence on his contemporaries and on nineteenth century ideals, with especial attention to "Sartor Resartus." Not offered, 1915-1916. One unit; one semester. (Dixon.)

**184b. Ruskin.** His ethical, esthetic, and economic teachings. Two units; first semester. (Dixon.)

**190. Principles of Literary Criticism.** A comprehensive study of the fundamentals of literature, with revision of theories and discussion. Not offered, 1915-1916. Two units; one semester. (Dixon.)

**193. English Translations of the Classics.** The Greek masterpieces are emphasized; translations from the Latin are chosen for the bearing of the original works upon English literature; selections are included from Dante. Not offered, 1915-1916. Two units; throughout the year. (Stelter.)

**197. Oral Interpretation.** For description of the courses see Education 112-113. This course is required of all English major candidates for the High School Teachers' Certificate who are not already satisfactorily equipped in this respect. Such candidates are advised to satisfy the requirement in their senior year. Open only to Seniors preparing for teaching or to graduate students. One unit; throughout the year. (Yoder.)

#### GRADUATE COURSES

**217. Northern Middle English.** The "Kingis Quair"; the poems of Henryson and Dunbar. Three units; second semester. (Dixon.)

**224. Early Middle English Literature.** A study of typical literary forms between 1100 and 1350. Two units; second semester. (Gaw.)

**255. The Early Popular Drama.** An intensive study of the scriptural, allegorical, and comedy elements in the drama preceding the Shakespearean period. Two units; second semester. (Gaw.)

**264. The History of the Novel.** The development of the European novel, with especial attention to its production in England. Two units; throughout the year. (Wood.)

**291. Theories of Poetry.** A study of the chief theories of poetry and the types of poetic literature, with illustrations



drawn mainly from the English poets. Two units; throughout the year. (Stelter.)

**294. The English Seminar.** One unit; throughout the year.

**295. The Teaching of English.** A study of the problems, methods, materials, and bibliography. Required of all candidates for the High School Teacher's Certificate offering English either as major or minor. Graduate course, but not credited toward the degree of Master of Arts. Three units; first semester. (Gaw.)

**Advisers.** For advice concerning the various details of their work graduate students electing English as major subject, and English major seniors who are prospective candidates for the High School Teacher's Certificate, will confer with the head of the department. Each undergraduate English major student will, at the beginning of the sophomore year, choose a permanent adviser from among the three chief members of the English faculty.

**Undergraduate Major Work.** Thirty semester units. In major work in English all students must include courses 20 and 112. Those who contemplate pursuing graduate work for the attainment of the degree of Master of Arts are notified that their undergraduate course must be so planned as to equip them with a reading knowledge of Greek, Latin, French, or German.

**Minor Work.** Ten semester units in addition to Course 1.

Each candidate for the department's recommendation for the bachelor's degree is expected to be able to interpret orally, with ease and effectiveness, moderately difficult passages of modern English verse and prose. To this end students doing major work in English should early in the course avail themselves of the privilege of electing courses in the College of Oratory. This statement applies with especial force to prospective teachers.

**Note**—For other courses of interest to students electing English as major subject, see the Department of Oriental Studies and General Literature.

Undergraduate students who contemplate the teaching of English should by all means notify the head of the department of that fact at the beginning of the senior year. Failure to do so may entail complications that will render it impossible for them to secure the Certificate in the minimum time.

**Requirements for the High School Recommendation.** An undergraduate English major course, followed by a minimum of eight graduate units in the English department. The course as a whole must include courses 20, 110, 112, a period course (see courses 121 to 149), 197 and 295. In addition the candidate must creditably pass the "English final examinations for graduates", as described below.

**Requirements for the Degree of Master of Arts.** A satisfactory undergraduate English major course, followed by a graduate course organized as prescribed in the general regulations for the degree of Master of Arts (which see), and compliance with the requirements concerning "English final examinations for graduates", as indicated below. Candidates for the degree of Master of Arts in English are also required to offer a reading knowledge of Greek, Latin, German, or French.

**The English Final Examinations for Graduates:** In addition to the regular course examinations there will be required of all English major candidates for the degree of Master of Arts or for the High School Teacher's Recommendation a more comprehensive test of their fitness for the honors in question. This will require of the candidate evidence of a scholarly attitude of mind and an habitual use of scholarly methods no less than a firm grasp of the subject-matter involved. The equipments required are:

1. Familiarity, obtained at first hand, with the chief masterpieces of English literature, with the history of its development, and with the methods of historical study.
2. Satisfactory special knowledge of one of the main literary periods or movements or types.

3. The ability to apply to a literary work of art of any of the well recognized types, the standard criteria, constructive, metrical, and stylistic.
4. A scholarly acquaintance with the methods of linguistic study and with the history of the development of the English language through its three main periods.
5. Skill in organizing and presenting thought orally and in writing.

The above examinations are conducted once every semester and must be taken at some time during the academic year at the end of which the degree or certificate in question is to be granted. Candidates for the Teacher's Certificate must pass with "recommended grades" in each of the five divisions specified. Candidates for the degree of Master of Arts must show high merit in each of the five divisions. In lieu of divisions 2 and 4 the candidate may offer final examinations in advanced courses covering material of the nature described, which examinations shall have been taken at this University within the same academic year.

## FRENCH

EDGAR M. VON FINGERLIN and LAWRENCE M. RIDDLE, Professors  
EVA F. DE KERPEZDRON, Instructor

### LOWER DIVISION COURSES

1. **Elementary French.** Grammar, elements of phonetics, reading of French texts. Outlines of French political history of the nineteenth century. Five units; throughout the year. (Riddle.)
2. **Modern French.** Selections from Chateaubriand, Hugo, Dumas, Sand, Balzac, Daudet, Zola, Flaubert. Outlines of French literature of the nineteenth century. Composition. Three units; throughout the year. (Riddle.)

## UPPER DIVISION COURSES

**106. French Literature of the Seventeenth Century.** A general survey with special attention to Corneille, Racine, and Molière. Offered 1917-1918. Two units; throughout the year. (Riddle.)

**107. French Literature of the Eighteenth Century.** A general survey with especial attention to Montesquieu, Voltaire, and Rousseau. Offered 1916-1917. Two units; throughout the year. (Riddle.)

**108. French Lyric Poetry of the Romantic School.** Lamartine and Hugo. Interpretation of romantic poetry according to such methods as those suggested by Roustan, "Précis d'explication française;" Rudler, *L'Explication française*." One unit; second semester. (Riddle.)

**109. Advanced French Composition.** Prerequisite, course 2. One unit; throughout the year. (von Fingerlin.)

**110. French Conversation.** Students are divided into sections of not more than ten each. Each section meets twice a week. Throughout the year, one unit a semester. (de Kerpezdron.)

**111. Teachers' Course.** The methods of teaching, and the finer points of the language. While primarily intended for teachers, the course is open also to those who have finished course 106 or 107. Two units; second semester. (von Fingerlin.)

## GRADUATE COURSES

**221. French Seminar.** Studies in French syntax. Two units; throughout the year. (Riddle.)

**222. French Literature of the Renaissance.** Special attention is given to Rabelais, Ronsard, and Montaigne. Offered 1916-1917. Two units; throughout the year. (Riddle.)

**223. French Drama of the Seventeenth Century.** First semester: Corneille and Racine; second semester, Molière. Offered 1917-1918. Two units; throughout the year. (Riddle.)

**224. French Phonetics.** The principles of phonetics in their application to French pronunciation. Passy-Rambeau, "Chrestomathie phonétique." Two units; throughout the year. (von Fingerlin.)

**225. Reading of Old French Texts.** "La Chanson de Roland," "Aucassin et Nicolette," and selections from Bartsch-Wiese, "Chrestomathie de l'ancien français." One unit; throughout the year. (Riddle.)

**226. French Phonology and Morphology.** Three units; throughout the year. (von Fingerlin.)

**Major Work:** Thirty units, including courses 2, 106, 107, 109 and 110. The student must also pass an examination in the history of French literature.

**Minor Work:** Ten units exclusive of course 1 and including courses 2 and 109.

**High School Teacher's Recommendation:** The requirements for major work, course 111, and a minimum of seven graduate units, including the seminar. The candidate must also pass an oral and a written examination in French syntax and French pronunciation.

## GEOLOGY

GILBERT ELLIS BAILEY, Professor  
HERBERT JONES, Museum Assistant

### LOWER DIVISION COURSES

**1. Physiography.** A study of the surface features of the earth and their relations to human life and industries. Lectures and recitations. Two units; one semester.

The course deals with subjects which are intermediate between Geology, on the one hand, and History, Sociology, Political Economy, and Biology on the other.



**2. Mineralogy.** A study of the properties, uses, and methods of determination of the most important minerals, ores, and gems. Laboratory, recitations, and lectures. Prerequisite, Chemistry 2 or its equivalent. Two units; throughout the year.

**3. Ores and Metals.** Course 2 in the Department of Chemistry.

#### UPPER DIVISION COURSES

**104. Commercial and Economic Geography.** A study of the effects of soil, climate, and geographical situation in determining the character of national industries and of international trade, commercial routes, seaports, exports and imports. An analysis of the fundamental natural factors necessary for man's economic progress. Prerequisite, Geology 1 or its equivalent. Two units; second semester.

**105. General Geology.** Lectures, laboratory and field work, with special attention to the geology of the Pacific Coast region. Two units; both semesters.

**106. Agricultural Geology.** Lectures on the origin, composition, classification and naming of soils; control of aeration and moisture condition; physical analysis of soils. Open to all classes. Two units; both semesters.

**107. Applied Geology.** The application of geology to oil, mining and minerals. Field work and study of the mineral resources of the State and their use. Two units; both semesters.

**108. Agronomy. The Essentials of Agriculture.** Lectures on methods of cultivation of the different types of soils; effect of tillage; soil hygiene; adaptation to crops; fertility of soils; fertilizers. Two units; first semester.

**GERMAN**

MARGARET GRAHAM BORTHWICK, Professor

BERTHA J. JACOBY-KIENLE, MYRTLE EMILY BILES, Associate Professors

**LOWER DIVISION COURSES**

1. **Elementary German.** Pronunciation, reading, and grammar, with practice in speaking and writing German. This course is intended for students who enter without German. It includes the essentials of German grammar, with various practical exercises in dictation, composition, translation at hearing, and oral and written reproduction. During the second semester some interesting short stories and characteristic poems are studied. Five units; throughout the year. (Kienle.)

**Note**—German 1 cannot be credited toward the required number of units for either major or minor work in German.

2. **Modern German.** Modern narrative and dramatic prose, selected poems, and one drama of Schiller or Lessing. Grammar continued, with written and oral exercises. Composition once a week. Collateral readings. For students who have had course 1, or two years of high school German. Three units; throughout the year. (Borthwick, Kienle, Biles.)

3. **German Conversation.** This course is designed to make the student familiar with common expressions that occur in every day life. Conducted entirely in German. For those deficient in the oral use of the language. To follow or accompany German 2. Two units; throughout the year. (Biles.)

4. **Scientific and Journalistic German.** Rapid reading of scientific prose and leading articles in German newspapers as found in Prehn's "Journalistic German" and current German periodicals. For students specializing in science. Open to those who have had course 2, or its equivalent. Two units; throughout the year. (Biles.)

## UPPER DIVISION COURSES

**103. Schiller.** Study of Schiller's life and works. Class reading and interpretation of dramas and poems. Collateral readings. Practice in composition. Open to students who have had course 2, or its equivalent. Three units; first semester. (Biles, Kienle.)

**104. Modern Historical Prose.** Historical novels, and speeches by prominent statesmen relating to important periods in the history of Germany, such as the Reformation, the times of Frederick the Great, and the nineteenth century, with collateral readings in history. Composition continued. Three units; second semester. (Biles.)

**105. Grammatical Review.** A systematic review of grammar. Exercises in composition and conversation. Introduction to Vietor's system of phonetics, with exercises in reading phonetic texts and in pronunciation. Open to those taking any course beyond 104. Two units; throughout the year. (Borthwick.)

**106. Heine.** Study of Heine's life and works. Lyrics; "Harzreise" and other prose writings. Collateral readings. Composition continued. Open to those who have had course 104, or its equivalent. Three units; first semester. (Biles.)

**107. Goethe.** Study of Goethe's life and works. Readings from "Aus meinen Leben," "Egmont," and "Tasso." Collateral reading and practice in composition. Three units; second semester. (Biles.)

**116. Outline of German Literature.** The development of German literature from the earliest fragmentary rhymes through the popular-epics and court-epics to the lyrics of the thirteenth century. Conducted in German. Collateral reading in modern German. Two units; first semester. (Borthwick.)

**117. Outline of German Literature** (continued). From the fourteenth century to modern times. The folk-songs, the crit-

ical writers, the romanticists, and the nineteenth century dramatists. Two units; second semester. (Borthwick.)

**128. Nineteenth Century Readings.** Representative dramas and novels from Grillparzer, Hauptmann, Freytag, and Schefel. Three units; first semester. (Biles.)

**129. Goethe's Faust.** Interpretation and discussion of both parts, with a short historical introduction, and collateral reading of Marlowe's "Faust" and of the "Puppenspiel." Three units; second semester. (Biles.)

#### GRADUATE COURSES

**209. German Literature of the Nineteenth Century** and its relation to the historical events and to the cultural and social developments of the time. Both the history and the literature are studied, with collateral reading and reports in German of the works read. The earlier and later romanticists and the patriotic poets. Three units; first semester. (Borthwick.)

**210. German Literature of the Nineteenth Century** (continued). As above. The dramatists of the middle and of the latter half of the century. Three units; second semester. (Borthwick.)

**211. Teachers' Course.** A course in the teaching of German. Discussion of methods. Reading of textbooks in common use. Practice in the application of phonetics to the teaching of pronunciation. Two units; first semester. (Borthwick.)

**212. Advanced Composition.** Intended primarily for teachers whose major or minor is German. The course gives practice in writing idiomatic German. Translations from English into German. Original themes. Colloquial practice. Two hours; second semester. (Borthwick.)

**222. Lessing.** Study of Lessing's life. Selections from his dramas and prose writings. Special attention paid to his critical works, and their service to German literature. Three units; first semester. (Borthwick.)

**223. Middle High German.** Introductory Grammar. Selections from the "Nibelungen Lied" and "Armer Heinrich." Three units; second semester. (Borthwick.)

**Major Work:** Thirty semester units, exclusive of course 1, and including courses 105, 107, 116, 117 and 129.

**Minor Work.** Ten units exclusive of course 1.

**High School Teacher's Recommendation:** Thirty semester units, exclusive of course 1, and including courses 103, 105, 107, 116, 117; also a minimum of seven graduate units, including 211. Each candidate must pass an oral and written examination in German grammar, reading and class-room conversation.

**The Degree of Master of Arts:** The German departmental requirements for this degree include: The full undergraduate major course; a minimum of eight graduate units, exclusive of 211; and a final examination, both oral and written, on the history of German literature in general and on some period in which the candidate has done intensive work.

## GREEK

ELEANOR ADELAIDE GARDNER, Instructor

### LOWER DIVISION COURSES

1. **Elementary Course.** Thorough drill in grammar and Greek composition. Xenophon's *Anabasis*. Five units; throughout the year.

2. **Homer.** *Iliad*, Books I-IV. Homeric dialect, scansion and mythology. Three units; first semester.

3. **Plato: Apology and Crito** and selections. Study of life and times of Plato. Greek prose composition. Three units; second semester.

4. **Herodotus and Lucian.** Two units; first semester.



5. **Aristophanes** and selections from Homer's *Odyssey*. Two units; second semester.

UPPER DIVISION COURSES

106. **Introduction to Greek Tragedy.** Study of the presentation of Greek drama. Two hours; either semester.

Other courses by special arrangement.

**HISTORY**

TULLY C. KNOLES, ROY MALCOM, ROCKWELL D. HUNT, JAMES MAIN DIXON, FRANK J. KLINGBERG, Professors; LESLIE F. GAY, JR., Associate Professor (on leave of absence).

LOWER DIVISION COURSES

1. **English History**, with special reference to social and literary development. Textbook, supplemented by lectures, reports and collateral reading. Two units; throughout the year. (Klingberg.)

5. **Greek History.** A survey of Greek history from the earliest times to the death of Alexander the Great. Lectures, readings, and reports. Three units; first semester. (Knoles.)

6. **Roman History.** A course covering the development of Rome from the foundations of the city to the close of the fourth century A. D. Lectures, readings, and reports. Three units; second semester. (Knoles.)

7. **Mediaeval History.** A general survey of the mediaeval period, with special reference to the development of great institutions, both of church and state. Discussions on mediaeval conceptions. Lectures, readings, and papers. Three units; both semesters. (Knoles.)

13. **History of the United States, 1787-1850.** A study of the development and history of national life in the United States from 1787 to the Compromise of 1850. Lectures and special investigations. Considerable attention is paid to the

development of political parties. Three units; first semester. (Malcolm.)

**13a. History of the United States, 1850-1912.** A continuation of course 13 from the Compromise of 1850 to the present time. Special attention paid to the period of reconstruction, and to the fields of political and economic development. Lectures, reports, and investigations. Three units; second semester. (Malcom.)

#### UPPER DIVISION COURSES

**102. English History in Shakespeare.** (a) The Lancastrian Tetralogy; "Richard II"; "Henry IV," 1 and 2; "Henry V." (b) The Yorkist Tetralogy; "Henry VI," 1, 2, 3; "Richard III." (c) "King John" and the days of Magna Charta. (d) "Henry VIII" and the English break with Rome. (e) British Legendary History: "Cymbeline," "Lear." The various sections are given in successive semesters. Two units; either semester. (Dixon.)

**103. Scottish History.** (a) Scotland in the sixteenth century, with special attention to Scott's "Lady of the Lake." (b) Celtic Scotland, with special attention to Shakespeare's "Macbeth." Three units; first semester. (Dixon.)

**104. Colonial History of America, 1000-1760.** Sources of American life, steps in the unifying process. Study of the fundamental laws of the colonies. Lectures, reports and investigations. Two units; first semester. (Malcolm.)

**104a. History of America, 1760-1787.** An investigation of the causes leading to the Revolution. Study of the movement for union and the Constitutional convention of 1787. Lectures and reports. Two units; second semester. (Malcom.)

**105. Church History.** A course intended primarily for students in the College of Theology; it covers the entire field of the development of the mediaeval church, and the growth of the modern denominations. Two units; throughout the year. (Knoles.)

**108. Renaissance.** A study of the Renaissance as it affected European life and thought, with special reference to artistic, literary, and political features. Open to well qualified Sophomores. Two units; first semester. (Klingberg.)

**109. The Reformation.** A study of the Reformation as it affected the religious, economic, and political development of Europe. Open to well qualified Sophomores. Two units; second semester. (Klingberg.)

**110. The French Revolution** and the Napoleonic Empire, 1789-1815. A brief review of the Ancient Regime, followed by a study of the political, social, and international aspect of the French Revolution and the Napoleonic Empire. Three units; second semester. Not given in 1916-17. (Klingberg.)

**111. Europe Since the Congress of Vienna.** A course covering the political development of Europe from the close of the Napoleonic Wars to the present time. Two units; throughout the year. (Klingberg.)

**112. Asiatic Studies.** (a) The founding of British Rule in Hindustan, with special attention to the careers of Clive and Hastings. (b) The Spanish Conquest and Government of the Philippines and the recent American Occupation. (c) The Portuguese in Asia, with special attention to the epic of Camões, "The Lusiads." (d) Mohammedan India, with special attention to the career and policy of Akbar. Each two units; both semesters. (Dixon.)

**113. China.** See Oriental Studies, No. 105.

**114. English Constitutional History.** An examination into the origin and the evolution of the English Constitution. Lectures, readings, and reports. Prerequisite, course 1. Not offered in 1916-17. Two units; throughout the year. (Klingberg.)

**115. English Economic and Social History.** A course covering the economic and social history of England from the earliest times to the present. Prerequisite, course 1. Three units; first semester. (Klingberg.)

**116. Pacific Slope History.** A special lecture course, beginning with the Spanish Colonial system. The origin of civilization in New Spain; the occupation and development of Alta California and the Oregon territory; the American conquest; the genesis of the Empire State of the Pacific. Special reference to California throughout. This course is designed to be especially helpful to history teachers and those expecting to teach history. Two units; throughout the year. (Hunt.)

**117. The Expansion of Europe Since the Fifteenth Century.** European discoveries, explorations, and settlements in America, Asia, Africa, and Australia. The rivalries of European powers, the growth of colonies, and the development of colonial systems and institutions. Two units; throughout the year. (Klingberg.)

**119. Greek History.** A critical study of the conditions of Greek life and thought, making a careful study of the evolution of political and social institutions. Lectures, papers on assigned subjects for research. Open only to advanced students and teachers. Two units; first semester. (Knoles.)

**120. Roman History.** A series of investigations into the genesis, growth, and organization of the Roman State with special emphasis upon the later Republican and early Imperial periods. Lectures, readings, papers on assigned subjects for research. Open only to advanced students and teachers. Two units; second semester. (Knoles.)

**201. Historiography.** A critical and comparative study of the leading historians, chiefly of the nineteenth century, their materials, methods of investigation and presentation, with a general consideration of the development of modern historical writing. One unit; throughout the year. (Klingberg.)

**216. American Government.** See Political Science No. 200.

**220. Teachers' Course.** A course for those who are planning to secure a High School Teachers' Recommendation. A discussion of the teaching of history in secondary schools, including criticism of textbooks and the uses of the library for high school students. Two or three units; either semester. (Knoles.)

**222. The History Seminar.** The purpose of the Seminar is to improve the method of study of history; to give training in historical method and criticism; to assist students in doing constructive work. As a guide to the study of method, Langlois & Seignobos' "Introduction to the Study of History" is used. In 1915-16 the major portion of the time was given to the study of British-American Relations During the Revolutionary period. Each student must show ability to do thorough research work. Two units; throughout the year.

**Major Work:** Thirty semester units, one-half of which must be in upper division courses.

**Minor Work:** Ten units, including at least four in upper division courses.

**High School Teachers' Recommendation:** Six units each of Ancient, Mediaeval, Modern, English, and American History, courses 216 and 220.

## ITALIAN

EDGAR M. VON FINGERLIN, Professor

### LOWER DIVISION COURSES

1. **"Italian Grammar."** Bowen's "Reader." Goldoni's "Il Vero Amico," Grandgents' "Italian Composition." Three units; throughout the year.

2. **"I Promessi Sposi."** Fogazzaro's "Pereat Rochus," and other modern works. Composition. Two units; throughout the year.



## UPPER DIVISION COURSES

**100. Dante, Tasso, Petraca.** Advanced Composition. Lectures on Italian Literature. Two units; throughout the year.

**JOURNALISM**

BRUCE ORMSBY BLIVEN, Professor  
JAMES MAIN DIXON, FESTUS E. OWEN, Lecturers  
JESSE RAY MILLER, Instructor

A two-fold point of view is maintained in the courses offered by the department of Journalism. Primarily, the purpose of these courses is to give an adequate professional training to those who wish to take up Journalism as a career. Secondly, the department offers the study of the American newspaper as an institution, for the benefit of those who do not wish to make this field their life work, but desire an understanding of the American newspaper, considered as a social force.

**1. News and Newswriting.** What constitutes news; its collection, writing and editing. The work of the reporter, his qualifications. Types of news stories, features and special articles, editorials and paragraphs; special correspondence; interviews, literary, artistic and dramatic criticism. Three units; first semester. (Bliven.)

**2. Organization of the Newspaper.** The rise, growth and present position of the newspaper; its organization and operation; editorial positions; syndicates, bureaus, press associations. The newspaper as a social force. Prerequisite, course 1. Three units; second semester. (Bliven.)

**3. Copyreading and Headlines.** The establishment and maintenance of a style sheet; punctuation, capitalization, abbreviation. Rewriting of copy, condensation and expansion. The writing of headlines. Prerequisites, courses 1 and 2. Two units; first semester. (Bliven.)

**4. Editing and Makeup.** A continuation of course 3, including problems of makeup, typographical style, news values

and display. Liberal practice in the handling of copy; the preparation of dummy pages. Prerequisite, course 3. Two units; second semester. (Bliven.)

**5. Advertising as a Business Force.** The theory and practice of business publicity. The relation of advertising to manufacture and to merchandising. Preparation of an advertising campaign, including preliminary investigation, formulation of sales plan, and preparation of copy. The various advertising media and their relation to one another. Not open to Freshmen. Two units; first semester. (Bliven.)

**6. The Writing of Advertising.** The preparation of copy and layouts; relation of copy to illustration; newspaper and magazine advertising; booklets, circulars, form letters, street car cards and billboards. Checking and testing copy. The duties of an advertising manager, agent and solicitor. The mechanics of advertising; type, paper, engraving and printing processes. Prerequisite, course 5. Two units; second semester. (Bliven.)

**7. Newspaper Principles and Problems.** A consideration of current newspaper problems, based in part on the study of well known American journals. Frequent lectures by noted journalists. Required of all Journalism majors; may be repeated each year. One unit; second semester. (Bliven.)

**8. Typography and Printing.** A laboratory course in the mechanics of printing, with occasional lectures. Setting type, making up, printing, folding and binding. The history of the printing press; study of type faces, harmony in display, title pages, composition of advertisements. Not open to Freshmen. One, two or three units; either semester. (Miller.)

#### UPPER DIVISION COURSES

**100. Advanced News and Feature Writing.** Special forms of writing for newspapers and other periodicals. Rapid writing of feature stories and special articles. Discussion of the magazine market and its tendencies. Prerequisites, courses 1 and 2. Two units; first semester. (Bliven.)

**101. The American Periodical.** The origin, rise and development of the magazine in America. Present day tendencies; the trade journal; the technical press. Typical examples of class publications will be studied. Prerequisite, course 100. Two units; second semester. (Bliven.)

**102. Current News and the Editorial.** A study of the functions of the editorial writer and his methods of work. News sources and their relative reliability. The events of the day will be made the basis of editorial interpretation. News reports in various publications will be compared. Prerequisites, courses 1 and 2. Two units; first semester. (Bliven.)

**103. Interpretation of News Values.** A continuation of Journalism 102. Weekly summaries of the world's events will be prepared and topics selected for editorial treatment. Students will compare their work with editorials in representative American journals. Prerequisite, course 102. Two units; second semester. (Bliven.)

**104. The Country Newspaper.** Rural journalism and its relation to the community it serves. The country editor and his duties. The style of the country paper. Business management; cost-finding; securing national advertising, developing local advertising. Prerequisites; courses 1 and 2. One unit, first semester. (Bliven.)

**105. The Literary Laws of Editing.** Growth of position of editor; the rise, development, types of periodical literature; editing of a classic; book reviewing. Two units; second semester. (Dixon.)

**106. Psychology of Advertising.** The fundamental psychological principles of interest and attention upon which modern advertising is based. Psychological effects of repetition, direct and indirect suggestion. The appeal to curiosity, pride, fear, etc. Prerequisites, Philosophy 1, Journalism 5 and 6. One unit; second semester. (Owen.)

**107. History of Journalism.** The earliest types of newspapers. The origin and development of the American press.

Personal journalism; Hearst; the newspaper of the future. Prerequisites, courses 1, 2, 3 and 4. One unit; second semester. (Bliven.)

GRADUATE COURSES

**200. Criticism and Reviewing.** A detailed study of the functions, powers and obligations of the reviewer. Literary, artistic and dramatic criticism. Two units; first semester. (Dixon.)

**Major Work:** Thirty units, including courses 1-4, 7, 102, 103, 107.

**Minor Work:** Ten units, including 1, 2, 107.

LATIN

RUTH W. BROWN, Professor  
WELCOME A. TILROE, Instructor

LOWER DIVISION COURSES

**1a. Elementary.** A course in forms and syntax followed by the reading of easy prose. Intended for students who have had no Latin in High School. Five units; throughout the year.

**2b. Intermediate.** Selections from Cicero, Virgil, and other Latin authors. The course is planned for students who have completed course 1a, or two years of High School Latin. Three units; throughout the year.

**Note**—Courses 1a and 2b count toward the Bachelor's degree, but will not be accepted as major work or toward satisfying requirements for the Teacher's Certificate.

**1. Cicero and Virgil.** Cicero's "De Senectute" and Virgil's "Eclogues." A reading course intended for students who present advanced Latin for entrance, or who can otherwise give evidence of fitness. Three units; first semester.

**2. Latin Syntax.** A review of Latin syntax in lectures and written exercises. The course supplements course 1 and is

strongly recommended to all registered for that course. Two units; first semester.

**3. Horace.** "Odes" and "Epodes." Attention will be given to subject matter, style, metrical reading, and study of the Augustan age and Horace's contemporaries. Three units; second semester.

**4. Latin Prose Composition.** Exercises in writing connected narrative and in rapid reading of easy prose. Recommended to all registered for course 3. Two units; second semester.

**5. Latin Comedy.** Terence and Plautus. At least three plays will be read with attention to early forms, meter, the development of Roman comedy, the Roman theater, and the presentation of plays. Three units; first semester.

**6. Livy and Tacitus.** The twenty-first and twenty-second books of Livy's history and selections from Tacitus will be read in connection with a study of the history and literature of the period of foreign conquest and of the early empire. Three units; second semester.

#### UPPER DIVISION AND GRADUATE COURSES

**107. Cicero's Letters.** A large number of Cicero's letters will be read with special attention to contemporary events. Two units; first semester.

**108. Roman Elegiac Poetry.** Selections from Catullus, Propertius, Tibullus, and Ovid, with reference to subject matter, artistic form, and the development of the Roman elegy. Two units; second semester.

**109. Advanced Latin Prose Composition.** A comparative study of English and Latin styles and of Latin equivalents of English constructions, and a systematic analysis of the simple and complex sentence structures. One unit; throughout the year.



**110. History of Latin Literature.** A general survey of Roman Literature. Selections from the representative authors will be read in translation or will be translated by the instructor. A reading knowledge of Latin is not required. Two units; second semester.

**111. Philosophical Writers.** Selections from Lucretius and Cicero with reference to the philosophical content. Two units; first semester.

**112. Juvenal, Martial, and Pliny.** Selections from the "Satires" of Juvenal, the "Epigrams" of Martial, and the "Letters" of Pliny. Lectures and assigned reading on Roman life and customs. Two units; second semester.

**113. The Teaching of Latin.** A study of methods and problems through lectures, reports, discussions, and practical exercises. Required of candidates for the High School Teacher's Recommendation in Latin. Two units; first semester.

**214 The Latin Seminar.** Primarily for graduates. In 1915-1916 the Seminar was devoted to a study of Virgil's Eclogues and Georgics. In 1916-1917 the field will be Roman Satire. Two units; throughout the year.

**Major Work:** Thirty semester units, including courses 1, 2, 3, 4, 9 and 10.

**Minor Work:** Courses 1, 2, 3 and 4.

**High School Teacher's Recommendation.** Thirty semester units, including courses 1, 2, 3, 4, 10, and 13, and one graduate course.

## MATHEMATICS

PAUL ARNOLD, Professor  
HUGH C. WILLETT, Associate Professor

### LOWER DIVISION COURSES

**1. Theory of Algebra.** A lecture and text book course in which emphasis is placed principally upon the theory and the

development of algebra. This course includes a review of elementary algebra, special attention being given to proofs of fundamental laws and principles. Three units; both semesters. (Arnold.)

**2. Solid and Spherical Geometry.** The fundamental propositions of the Euclidean geometry of space. Three units; first semester. (Willett.)

**3. Trigonometry.** Plane trigonometry and its applications, the trigonometry of the right spherical triangle, and logarithms. Three units; second semester. (Willett.)

**4. Algebra.** Mathematical induction, equivalent equations, surds and complex numbers, theory of quadratic equations, simultaneous quadratic and higher equations, ratio, proportion, variation, the progressions and other simple series, inequalities, permutations and combinations, the binomial theorem for any exponent, limits and infinite series, determinants, the theory of equations. Two units, both semesters. (Willett.)

**5. Advanced Trigonometry.** This course is planned particularly for engineering students, and includes a review of plane trigonometry, as well as a thorough study of the fundamental principles of spherical trigonometry and the application of its formulas to the solution of spherical figures. Prerequisite, course 3 or entrance trigonometry. Two units; first semester. (Arnold.)

**6. Plane Analytic Geometry.** The analytic geometry of the straight line, the circle, and the conic sections, including a discussion of the general equation of the second degree and some special examples in higher loci. Five units; second semester. (Arnold, Willett.)

**7. Differential Calculus.** Development of the fundamental principles and formulas, with applications to various problems in geometry and analysis. Three units; first semester. (Arnold.)

## UPPER DIVISION AND GRADUATE COURSES

**108. Integral Calculus.** The general principles of the integral calculus are developed, and the usual applications made to centers of gravity, to moments of inertia, and especially to geometry. Three units; second semester. (Arnold.)

**111. Analytical Mechanics.** The mathematical treatment of statics, kinematics, and dynamics. Prerequisite, courses 7 and 108. Three units, first semester; two units, second semester. (Lawrence.)

**112. Descriptive Astronomy.** A general course, requiring only the mathematics of courses 1-3. Open to students in the last two years of college course. Two units; both semesters. (Lawrence.)

**209. Advanced Analytic Geometry and Differential Equations.** The analytic geometry is a continuation of course 6, and includes a brief course in analytic geometry of three dimensions. The course in differential equations is elementary and open to students who have taken course 108. Two units; both semesters. (Arnold.)

**210. Teachers' Course.** Lectures on teaching mathematics, and lectures giving a review of elementary mathematics from the standpoint of preparing teachers for secondary schools. The history of mathematics is also studied. Two units; both semesters. (Arnold.)

**Major Work.** Thirty semester units.

**Minor Work.** Ten units, including 7 and 108.

**High School Teachers' Recommendation.** Courses 1-7, 108, 112, 209, 210.

**MUSIC**

WALTER FISHER SKEELE, Professor

Students who take harmony and theory or advanced instrumental or vocal work in the College of Music may be allowed College credit for the same, but the credit shall in

no case exceed fifteen semester units, and will be given only upon the recommendation of the Dean of the College of Music.

## ORATORY

BEULAH WRIGHT, Professor  
GERTRUDE COMSTOCK, ELIZABETH YODER, JAY L. CHESNUTT,  
EVA M. SMITH, Associate Professors

1. **Vocal Expression.** The principles of expression, voice building, and tone placing. Interpretation of literature. Two units, either semester. (Open to freshmen.)

2. **Modern Poets and Prose Writers.** A general study of the life and writings of the modern poets and prose writers. Two units, both semesters. (Open to freshmen.)

3. **Shakespeare.** Critical notes and the history, philosophy and construction of the plays are considered with reference to interpretation. Two units; both semesters. (Open to freshmen.)

4. **Art of Interpretation.** A study of the art principles involved in the public interpretations of literature. Two units; both semesters. (Open to freshmen.)

100. **Public Speaking.** A study of the preparation for speechmaking, the ends, the forms of support, and the choice of material. Practice in making extemporaneous speeches in class. Criticism of speeches in class and public meetings. Previous preparation in elocution and delivery is advised. Open also to sophomores. Two hours; both semesters.

101. **Debating and Argumentation.** Methods of handling evidence, making briefs, and delivering debates; the science of argumentation. Course 100 is advised as a prerequisite. Open also to sophomores. Two hours; both semesters.

200. **Interpretation and Expression.** Lectures on voice technique and interpretation of literature, oral practice of selections from masterpieces. One unit, both semesters. (Open only to graduates who are candidates for the teacher's certificate.)

## ORIENTAL STUDIES AND GENERAL LITERATURE

JAMES MAIN DIXON, J. G. HILL, ROY MALCOM, Professors  
JOHN HEDLEY, Lecturer in Chinese History and Civilization  
IOHANE F. SAKAIZAWA, Instructor in the Japanese Language  
ARTHUR F. TORRANCE, Instructor in Rhetoric

1. **Japanese History and Civilization.** Early Japan. Japan as the pupil of Korea and China. Influence of Buddhism. The rise of feudalism and of the Shogunate. The century of foreign intercourse. The later centuries of Tokugawa isolation and centralization. The Meiji era. Problems of today. Two units; first semester. (Dixon.)

2. **Chinese History and Civilization.** The successive dynasties of the great empire. Foreign relations during the last few centuries. Founding of the republic. Problems of today. Two units; first semester. (Hedley.)

3. **Philippine History and Civilization.** The conquest of the islands in the sixteenth century; intercourse with China and Japan in early times; the Spanish occupation; the American teacher at work; the industrial future of the islands. Two units; second semester. (Dixon.)

4. **The Founding of British Rule in Hindustan.** A course based on the two Indian essays of Lord Macaulay, "Clive" and "Warren Hastings." Two units; second semester. (Dixon.)

5. **Christian Missions in the Orient Since the Day of Xavier.** The lives and work of Cary, Martyn, Duff, John Willians, Morrison, Burns, Verbeck, Nicolai, and the Judsons. Two units; second semester. (Dixon.)

6. **English Rhetoric and debating for Oriental Students.** A class intended to give Japanese and other Oriental students more readiness in the use of English. Two units; both semesters. (Torrance.)

7. **The Japanese Colloquial.** Chinese ideographs and Japanese syllabaries. Romaji transliteration. Grammar of the spoken language, with exercises. Two units; second semester. (Sakaizawa.)



**8. The Chinese Mandarin Language.** One unit; first semester. (Hedley.)

UPPER DIVISION COURSES

**100. Oriental Philosophies and Religions.** (Philosophy and Psychology.) Two units; both semesters. (Dixon.)

**101 Japanese Literature and Bibliography in English.** A discussion of authors who have written upon Japan, from Kaempfer to Aston. The Japanese miniature poem (uta) in the original and in translations. Two units. (Dixon.)

**102. Persian Literature and Persian Themes in English Literature.** The "Rubaiyat" of Omar Khayyam; Firdausi's "Shah-Nameh"; Arnold's "Sohrab and Rustum." Two units; first semester. (Dixon.)

**103. The Portuguese in Asia.** Camoëns' "Lusiads," with a study of the Epic in Literature. Two units; second semester. (Dixon.)

**104. The Political Development of Japan.** Mediaeval feudalism; Tokugawa bureaucratic methods; modern Imperialism. Extra-territoriality until 1898. Summer session, 1916. Two units. (Dixon.)

**105. The Political Institutions of China.** Two units; second semester. (Hedley.)

**106. International Law.** (Political Science 100.) Two units throughout the year. (Malcom.)

**107. The Wisdom, Literature and Poetry of Israel.** (Religious Education 100.) Two units; first semester. (Hill.)

**108. Hebrew Doctrines, Institutions, Typology.** Religious Education 101.) Two units; first semester. (Hill.)

**109. The Messianic Hope.** Its appearance in Mithraism and other Oriental religions; its development and fulfilment. (Religious Education 112.) Two units; second semester. (Hill.)

**110. International Relations in the Pacific from Magellan to Commodore Perry.** The stories of Drake's and Caven-dish's circumnavigation of the globe; how Hideyoshi threat-ened to attack the Philippines; Mexico and Manila; the Isles of Gold and Silver. Two units. (Dixon.)

**111. Kipling's India.** Bombay, Simla, Peshawar, Lahore, Calcutta and other localities, with their literary traditions. Two units; Summer session. (Dixon.)

**112. Mohammedan India.** Dealing especially with the char-acter and policy of Akbar. Two units; first semester. (Dixon.)

**113. Rabindranath Tagore, Poet and Essayist.** Two units; second semester. (Dixon.)

**114. Celtic Civilization and Literature.** The bards of Ire-land, Scotland and Wales. Traditions of the Ilse of Man, Cornwall, Brittany and Walloon Belgium. Origin and growth of the Arthurian romance. Two units; second semester. (Dixon.)

**Major Work.** Thirty semester units, to be accompanied or preceded by the following courses: Religious Education 1, 2 and 21. History 117, and Sociology 103.

**Minor Work.** Ten semester units.

## PHILOSOPHY AND PSYCHOLOGY

JOHN G. HILL, FESTUS E. OWEN, Professors

**1. General Psychology.** A textbook on Psychology. Lec-tures and collateral reading on various topics. Classroom demonstrations, with guidance to private observation. Sup-plementary elementary experimental work from Seashore's "Elementary Experiments in Psychology" and Witmer's "Analytical Psychology." Three units; first semester. (Owen.)

## UPPER DIVISION COURSES

**102. Applied Psychology.** An outline study of the applications of psychology to the problems of health, vocational guidance, mental measurement, advertising, and salesmanship. Lectures, readings, reports, Two units; second semester. (Owen.)

**103. The Psychology of Religion.** This course will deal with the normal and abnormal phenomena of religious experience; religion in relation to the subconscious and the conscious; faith cures, conversion, the growing life, inspired genius, non-religious persons, congregational and revival control, etc. Two units; second semester. (Hill.)

**104. The Psychology of Thinking.** A study of the nature and function of thinking. The aim is, through the insight gained into the nature and function of thinking, to develop in the student that habit of thought which is seen to be most fruitful in grappling with the problems that arise in individual experience. The viewpoint is biological. Inquiry is made into the conditions that give rise to problems and reflective processes, and the way in which thinking attacks and solves these problems is exhibited. Applications are made to the problems of education, science, and every-day life. Three units; second semester. (Owen.)

**105. Abnormal Psychology.** A study is made of dreams, hallucinations, hysteria, hypnotism, telepathy, spiritism, multiple personality, mental healing, the subconscious, and kindred topics. The aim is to discover the underlying principles of abnormal mental processes and to correlate them with the normal psychic activities. Two units; first semester. (Owen.) See Sociology 106.

**106. Social Psychology.** (Sociology 120.) Two units, first semester. (Bogardus.)

**107. History of Psychology.** The history of the ideas that constitute the subject of psychology. These forms were discerned and their functions interpreted by the successive

writers who appear in the History of Philosophy. One unit; both semesters. Not given 1916-17.

**108. Elementary Experimental Psychology.** Elementary laboratory study of visual, cutaneous, and auditory sensations; space perception. The purpose of the course is to acquaint the student with the methods of experimental study of psychological problems, thus preparing him for advanced experimental work and at the same time giving him a more intimate knowledge of the facts and principles of general psychology. One hour per week will be devoted to lectures and reports, two laboratory periods per week to experimental work. Three units. (Owen.)

**109. Genetic Psychology.** A study of the genesis and evolution of conscious processes and behavior. Types of animal behavior, racial and individual development. Special attention to the growth and development of the child mind. The course is conducted with reference to the problems of the teacher. Two units; second semester. Not given 1916-17. (Owen.)

**120. Ethics.** This course is based upon the text of Dewey and Tufts' "Ethics," with collateral study of Mill's "Utilitarianism," "Kant's "Metaphysics of Ethics," and Spencer's "Data of Ethics." The general nature of moral conduct is studied, the evolution of the moral problem from primitive life to the present is traced, a comparative study of current ethical theories is attempted, and some application of the results of these studies is made to present problems of individual and social life. Two units; first semester. (Owen.)

**121. Theism and the Philosophy of Religion.** A careful examination of the leading theories offered in explanation of the ultimate nature of reality. A clear philosophy of religion is sought by a sympathetic study of the light which recent science sheds upon the problems of nature, man, and mind. The texts used are Iverach and Bowne. Prerequisites, Philosophy 1. Two units; second semester. (Hill.)

**122. Evidences of Christianity.** The various evidences for the truth of Christianity. Two units; second semester. Not given 1916-17. (Hill.)

**123. Philosophy of the Christian Religion.** An attempt to understand the genius of Christianity by a searching study of the teaching of Jesus as found in the original sources. See Religious Education 110. Two units; first semester. (Hill.)

**140. Elementary Logic.** A study of the inductive and deductive aspects of reasoning, with application to practical problems. It is the aim of this course to stress the vital connection between logic and the practical problems of everyday life, to train the student in critical habits of thought, and to give him a good basis for further philosophical study. While Philosophy 1 is recommended as a preliminary, it is not required. Three units; first semester. (Owen.)

**141. History of Philosophy.** Rogers' "History of Philosophy," covering Ancient and Modern Philosophy. Three units; both semesters. (Hill.)

**142. Metaphysics.** A study of the ultimate nature of things. An attempt to answer the question: What is the ultimate nature of reality, of being, of change and identity, of time and space, of matter, of force and motion, of law and evolution, of God, the soul, and freedom? Offered alternate years with course 51. Two units; second semester. (Hill.)

**144. Philosophy of Civilization.** A course that investigates the forces and forms that have built up civilization. The study touches the Philosophy of History. Two units. Not given 1916-17.

**145. The Philosophy of Governments.** An inquiry into the forms that sovereign power has assumed in the process of historical governments. The study touches the Philosophy of History. Two units. Not given 1916-17.

**146. Oriental Philosophers and Religions.** Early Babylonian and Persian philosophical thought, Hindu speculation,



the Forest philosophers of India, Buddhist philosophers, Mahomedan philosophers. The Ethics and intellectual activities of China, Shintoism and Bushido, Zen and other sects. Two units; both semesters. (Dixon.)

147. **Philosophy of Education.** (See Education 110-11.)

148. **Aesthetics.** (See Education 107.) (Stowell.)

149. **The Philosophy of Kant.** Select portions of Kant. Two units; first semester. (Hill.)

150. **The Philosophy of Hegel.** Select parts of his philosophy. Two units. (Not given during 1916-17.) (Hill.)

151. **The Philosophy of Henri Bergson.** The text used is "Creative Evolution." This course seeks to understand the new philosophy of life—"vital impetus." Offered alternate years with course 42. Two units; first semester. (Hill.)

152. **Present Day Philosophy.** Select portions from Eucken, Royce, Bowne, Ward, Lodge, James, Nietzsche, Moore, Howison, Dewey, Stuart and Rashdell will be studied. Two units; second semester. Omitted 1916-17. (Hill.)

**Major Work.** Thirty semester units.

**Minor Work.** Ten semester units.

## PHYSICAL EDUCATION

WM. RALPH LA PORTE, Professor of Physical Education  
DEAN CROMWELL, Director of Competitive Athletics  
EDNA A. COCKS, Assistant Professor of Physical Education (Women)  
CHESTER H. BOWERS, M.D., Medical Examiner of Men  
ELSA H. HORSTMANN, M.D., Medical Examiner and Lecturer in  
Hygiene to Women  
BERNHARD OERTLY, JESSIE GRIEVE, GRACE WITHERELL,  
RUTH WININGER, Gymnasium Assistants

The aims of the department are: (1) to develop organic power without which physical and mental efficiency are impossible, and thus to develop physical judgment, presence of mind, self-reliance, courage, and strength of will; (2) to secure

harmonious muscular development and a reasonable degree of bodily skill and grace; (3) to conserve the social and moral values of sports and games, and give to all students an equal opportunity to take part in college athletics; (4) to develop the "habit of exercise" as a balance to the sedentary demands of University life; (5) to train physical educators and instructors, play leaders and recreation directors, for service in educational institutions, clubs, playgrounds, Young Men's and Young Women's Christian Associations, etc.

For description of the department equipment see Index under "Physical Education."

**Physical Requirement:** A minimum of four units physical credit is required of every student for admission to Junior standing. One unit credit represents the successful completion of a two-hour course lasting through one semester. Two units credit per semester may be secured by taking two such courses, and the full requirement thus be met in one year.

All **Freshmen** are required to take at least one two-hour course throughout the year, in the Gymnasium (see Physical Education 1). If the physical condition warrants, they will be permitted to elect the other two units requirement in outdoor athletics, either in the Freshman year or later. (See Physical Education 4.) Physical Education 10 Hygiene is also required of Freshman women.

Women will consult the women's director before securing their gymnasium suits. Men's suits consist of white running pants, sleeveless shirt, supporter, and tennis shoes.

**Physical Examinations:** Every student upon entering the department is given a thorough physical examination, in order that the physical condition may be known; and where defects exist, special exercises are prescribed and advice given as to care of the body, etc. The heart, lungs, sight, and hearing are carefully tested, various strength tests applied, and measurements taken. Where the physical condition makes it advisable, students are given special corrective work suited to their needs and strength.

The physical examination must be taken before entering any class work, and each student should make it a point to register early for gymnasium and get the examination out of the way before the last registration day.

#### LOWER DIVISION COURSES

**\*1. General Gymnastics.** A course combining recreation with developmental and corrective work, in the effort to develop organic power, motor efficiency, co-ordination, and a fair amount of muscular strength. Required of all Freshmen. Two or four hours per week, one or two units; throughout the year.

(a) **Men.** Free and light gymnastics, elementary heavy gymnastics, including all the more common pieces of apparatus, and recreative games and races.

(b) **Women.** Systematic class work in gymnastics, including work with dumbbells, Indian clubs, and wands; also rhythmical exercises for grace and harmony of movements. Proper carriage of body is taught by the use of fundamental Swedish and German gymnastics.

**2. Advanced Gymnastics.** A continuation of course 1 on a much more advanced scale. Open only to students who have satisfactorily completed course 1. The work is systematically progressive, and advances as fast as the ability of students permits. Two hours per week, one unit; both semesters.

(a) **Men.** Advanced apparatus will receive much attention, and opportunity will be given for specialization in various activities. Gymnastic dancing.

(b) **Women.** Advanced apparatus work, Swedish, German and aesthetic gymnastics.

---

**\*Note**—Courses 1 to 9, inclusive, apply only on the four required physical credits. Courses 10 and following do not apply on required gym., but credit is regularly given for them on the one hundred and twenty units required for graduation.

**3. Corrective Gymnastics.** Designed to give personal instruction and training to students whose condition prevents their participation in the regular course. Required of all Freshmen unfitted to take course 1. Two hours per week, one unit; throughout the year.

(a) **Men.**

(b) **Women.**

**4. Out-door Sports.** A supplement to course 1. Students may elect only two of the four required physical credits in this course.

(a) **Men.** Football, track, basketball, baseball.

(b) **Women.** Tennis, basketball, volleyball, indoor baseball, handball, hockey.

**10. Hygiene and Sanitation.**

(a) **Men.** (See Department of Biology, General Biology 1 and 2.) Two units; throughout the year. (Ulrey.)

(b) **Women.** Lectures and readings covering the following topics: Food and clothing; bathing; respiration and circulation; general care of the body, with special attention to the eye, ear, nose, and throat; rest and recreation; diseases; sanitation. Two units; throughout the year. (Horstman.)

**15. Principles of Physical Education.** A study of the underlying principles of Physical Education with application to present day needs. The history of physical education will be traced, giving special attention to the noted German and Swedish systems. Study of the modern American movement will include the work of such prominent leaders as Sargent, Hitchcock, Seaver, Gulick, and others. Three units; first semester. (LaPorte.)

**16. First Aid to the Injured.** A course based on the International Red Cross Text Book on First Aid, covering emergency treatment of sprains, dislocations, fractures, poisons; the use of bandages, methods of carrying the wounded, recovery of drowning persons. Two units; second semester. (LaPorte.)

**20. Playground and Gymnastic Games.** Intended to provide a working knowledge of games and folk dances, for use on the playground and in the gymnasium. The work consists of lectures on theory of play, theory of games, readings, reports, and papers, together with practical application of the theory in the gymnasium. Two units; second semester. (Cocks.)

**22. Aesthetic Technique and Folk Dancing.** A study of the fundamentals of aesthetic movements, for the purpose of developing greater muscular co-ordination, poise, and control. The native folk dances of various countries are studied, including Sweden, Russia, Holland, Germany, France, and England. This gives the student a better understanding of the life and customs of these people. Two units; throughout the year. (Cocks.)

#### UPPER DIVISION COURSES

**106. Physical Education Methods.** A course of practical training in methods of handling squads and classes on the gymnasium floor, with a careful study and application of the nomenclature for calisthenics, apparatus, and gymnastic dancing. Sample lessons in German and Swedish gymnastics will be prepared and taught, subject to the open criticism of the class and instructor. Two hours lecture and practice, and two hours experience per week. Two units; first semester.

(a) **Men.** (LaPorte.)

(2) **Women.** (Cocks.)

**107. Physical Education Administration.** A continuation of course 106, with a more advanced study of general methods of organizing and administering a Physical Department. Methods of conducting meets, tournaments, and contests will be studied. Practice work will be given in conducting classes under supervision. Two hours lecture and practice, and two hours experience per week. Two units; second semester.

(a) **Men.** (LaPorte.)

(b) **Women.** (Cocks.)



**109. Theory of Play.** A study of the nature, function, and need of play; theories of play; pleasurable elements in games; criteria of the value of play; place of play in life and education; aims and spirit in the conduct of play; age and sex differences; need for play spaces and organized play in school, city, and country; significance of the playground as related to social conditions of the neighborhood. Three units; first semester. (LaPorte.)

**110. Playground Administration.** History of Playgrounds; construction and equipment; maintenance and supplies; organization and management of activities; athletics, games, gymnastics, contests, tournaments, care and use of apparatus, story-telling, etc.; government and discipline; hygiene of the playground. Prerequisite, course 109. Arrangements have been made by which practice work can be secured on the municipal playgrounds. Two units; second semester. (LaPorte.)

**111. Physiology of Exercise.** A study of the effects of exercise on health, with consideration given to movements, heat, combustion, fatigue, breathlessness, sickness, exhaustion, training, overwork, exercises of speed, strength, and endurance. Two units; first semester. (LaPorte.)

**112. Kinesiology.** A brief study of the motor organs with reference to joint and muscular mechanism. The relation of various sets of movements to muscular development. Definitions, grouping, and arrangement of gymnastic movements. Two units; first semester. (Cocks.)

**115. Anthropometry and Physical Examinations.** A study of physical characteristics and their influence on the individual; physical defects; simple tests for abnormalities; methods of taking physical measurements, and testing heart, lungs, eyes, ears, etc. Prescription of exercise. Two units; second semester. (LaPorte.)

**120. Massage and Orthopedic Gymnastics.** A study of the physiologic and therapeutic effects of massage; its appli-

cation to various diseases of the muscles, tendons, and joints. Methods of correcting improper posture, uneven and rounded shoulders, curvature of the spine. Two units; second semester. (Cocks.)

**A Certificate of Proficiency** will be given to students completing required courses, including about 30 units.

## PHYSICS

ARTHUR W. NYE, J. H. MONTGOMERY, Professors

AUGUST HUND, Assistant Professor

L. T. CLARK, H. L. BRIGGS, Laboratory Instructors

### LOWER DIVISION COURSES

#### General Physics

2. **Mechanics.** Lectures and recitations. Three units; first semester. (Hund.)

3. **Mechanics.** Laboratory course. Three hours during one afternoon of each week. One unit, first semester. (Nye.)

4. **Heat.** Lectures and recitations. Two units; first semester. (Nye.)

5. **Heat.** Laboratory course. Three hours during one afternoon of each week. One unit; first semester. (Nye.)

6. **Electricity.** Lectures and recitations. Three units; second semester. (Hund.)

7. **Electricity.** Laboratory course. Three hours during one afternoon of each week. One unit; second semester. (Nye.)

8. **Light.** Lectures and recitations. Two units; second semester. (Nye.)

9. **Light.** Laboratory course. Three hours during one afternoon of each week. One unit; second semester. (Nye.)

**Note**—In all the above classroom courses Kimball's "College Physics" is used as a text book, supplemented by lecture notes and mimeographed notes. The student is expected to have had a course in High School Physics and Plane Trigonometry. In the laboratory courses, instruction sheets prepared by the department are the basis for the work. The experimental work performed by the students is similar to that described in Millikan's "Mechanics, Molecular Physics and Heat" and Miller's "Laboratory Physics." Courses 3 and 5 may be taken coincidentally, half of the time being spent on each, and half credit received. The same is true of Courses 7 and 9.

**16. Applied Electricity.** A course in the principles and applications of electricity. Prerequisites, Physics 6. Two units; second semester. (Nye.)

**17. Physical Measurements.** Laboratory course to accompany 16. One unit; second semester. (Hund.)

**21. Shop Work.** Instruction in the use of wood and metal working tools and machinery, including cutting, filing, drilling, tapping, polishing, screw-cutting and elementary lathe work. Three or six periods in laboratory, one or two units; either semester. (Hund.)

#### UPPER DIVISION COURSES

**105. Electrical Measurements.** A laboratory course in which the theory and methods of exact electrical determination are taken up, including the determination of resistance by various methods, galvanometer constants, the measurement of current and electromotive force, insulation tests, hysteresis and permeability tests, the calibration of instruments, the use of condensers, the measurement of induction, etc. Six periods per week. Two units; either semester. (Hund.)

**106. Heat.** Study of state changes, kinetic theory, radiation, and exact methods of experimental work. Two units; first semester. (Nye.)

**107. Physical Measurements.** To accompany course 106. Two units; first semester. (Nye.)

**108. Light.** Study of lens imperfections and methods of correcting; interference, polarization, spectroscopy, etc. Two units; second semester. (Nye.)

**109. Physical Measurements.** To accompany course 108. Two units; second semester. (Nye.)

**110. Sound.** General principles, theory of vowel sounds, construction of musical instruments, architectural acoustics. Two units; first semester. (Nye.)

**111. Physical Measurements.** To accompany Course 110. Two units; first semester. (Nye.)

**112. Photometry and Illumination.** Lectures and recitations. A study is made of the physiological and physical phenomena of artificial illumination, methods of measurement, types of photometers, types of illuminants and their characteristics, reflectors, and the principles of interior and street illumination. Three units; first semester. (Nye.)

**113. Photometry.** A laboratory course to accompany Physics 112. One or two units; first or second semester. (Nye.)

**114. Thermodynamics.** A study of the laws of gases, heat cycles, temperature-entropy diagrams, pressure-volume diagrams applied to gas, hot air and steam engines and refrigerating machines. One unit; first semester. (Nye.)

**116. Radio-activity and Passage of Electricity Through Gases.** Lectures and recitations. Two units; second semester. (Montgomery.)

**118. Wave Motion. Lectures.** A study of water, sound and ether waves and their phenomena. Two units; first semester. (Hund.)

**120. Wave Motion.** A continuation of course 118 and dealing exclusively with the phenomena of electro-magnetic waves, their production, measurement, use, etc. Two units; second semester. (Hund.)

#### GRADUATE COURSES

**202. High Frequency Measurements.** Lectures. Study of methods of production and measurement of high frequency currents and electro-magnetic waves and their phenomena. Two units; first semester. (Hund.)

**203. High Frequency Measurements.** Laboratory course to accompany course 202. Four hours each Saturday morning. Two units; second semester. (Hund.)

**206. Teacher's Course.** Lectures and discussions of methods of presenting and teaching various parts of Physics and the equipment and management of the laboratory. Two units; second semester. (Nye.)

**Major Work:** Twenty-four hours in Physics and ten hours in Electrical Engineering or Civil Engineering.

**Minor Work:** Twelve units, including course 105.

**High School Teacher's Certificate.** The candidate must complete courses 2 to 9, 21, 105, 114, 116, 202, 203, 206, courses in Mathematics, including the Calculus, elementary and advanced courses in Chemistry and sufficient other courses in pure and applied Physics to demonstrate his ability to pursue methods of thinking and experimenting, which are in accord with present-day physical scientific investigation.

For additional work in theoretical and applied Physics see courses in Civil and Electrical Engineering.

## POLITICAL SCIENCE

ROY MALCOM, FRANK J. KLINGBERG, JAMES MAIN DIXON,  
Professors  
JOHN HEDLEY, Lecturer

### LOWER DIVISION COURSES

1. **Introduction to Political Science.** The historic origin of political science; theories of the State; the nature of sovereignty; the structure and province of government. Lectures, readings, reports. Two units throughout the year. (Malcom.)

2. **Elementary Law.** A study of elementary law, involving the use of a text book, lectures and special readings. Designed specially for those students who, though not intending to enter the legal profession, desire to have an elementary knowledge of law. Instructor and hours to be announced.



3. **Political Conditions in the Philippines.** (Dixon.) See Oriental Studies 3.

UPPER DIVISION AND GRADUATE COURSES

100. **International Law.** The nature, sources, and principles of International Law; the influence of Christian civilization upon rules. Special attention is given to The Hague Conferences of 1899 and 1907. Lectures, readings, and study of cases. Two units; throughout the year. (Malcom.)

101. **Parties and Governments in Europe.** A series of studies in the field of the comparison of the different methods of government in actual practice in the various states of Europe. Lectures, readings, and reports. Three units; second semester. (Klingberg.)

102. **Political Institutions of China.** (Hedley.) See Oriental Studies.

103. **European Expansion in Asia, with Special Reference to French and Dutch Methods of Colonization.** (Klingberg.) See History 118.

104. **The Political Development of Japan.** (Dixon.) See Oriental Studies 104.

105. **Political Institutions of India in the Sixteenth Century.** (Dixon.) See Oriental Studies 114.

106. **The Government of England, Colonial Government, and Self-Government Within the British Empire.** (Klingberg.) Two hours; throughout the year.

107. **Municipal Problems.** Three units; first semester. (Hunt.) See Economics 106.

108. **History of American Political Parties.** A study of the history of the organization and development of the leading political parties in the United States, showing their relation to the current political problems. Readings, lectures, reports. Two units; first semester. (Malcom.)

**200. American Government.** A study of municipal, state, and national government in actual operation. Special attention is given to the practical administration of government. Lectures, reports, and special investigations. Three units; both semesters. (Malcom.) See also History 216.

**Major Work:** Thirty semester units. In meeting the requirements for the major, courses may be chosen, with the approval of the department, from other fields, particularly the fields of History and Economics. In addition to the regular lectures and classroom work it is the plan of the department to have addresses from time to time by men and women who are engaged in the actual administration of government.

**Minor Work.** Ten semester units.

## RELIGIOUS EDUCATION

JOHN G. HILL, ROBERT J. TAYLOR, J. H. MONTGOMERY,  
Professors  
CARL S. KNOPF, Assistant Professor

### LOWER DIVISION COURSES

1. **The Pentateuch and Other Historical Books of the Old Testament.** The origin, history, tradition, cosmology, morals, laws, government, and religious philosophy of the Hebrews from Abraham to Solomon will be considered. The questions of date, authorship, purpose, plan, style of literary composition and ruling ideas of each book will be studied. Two units; first semester. (Knopf.)

2. **The Prophetic and Chronicle Books of the Old Testament.** This course will survey the varied and swiftly changing periods of Hebrew history from the close of the United Kingdom to the end of Old Testament times. The greatest stress will be laid upon the study of the prophets; their unique place and power, their relation to state and Church, their distinctive messages and permanent contribution to the history of religion. Two units; second semester. (Knopf.)

**10. The Apostolic Age of the New Testament.** This course is a careful survey of the Apostolic Church of the first century, its origin, its strange success, its painful conflicts with Judaism, its brutal persecutions by Paganism, and its new life in the dying Empire; also a comparison of the religious ideas of Paul, Peter, James, and John, and of their mode of inspiration. Two units; first semester. (Hill.)

**11. The Gospel History and Literature of the New Testament.** A study of the life, teachings, work, and significance of Jesus Christ as portrayed in the Four Gospels and as seen against the historic background of modern scholarship. Special emphasis is laid upon the living authority of Jesus and the ruling ideas of the Sermon on the Mount in sharp contrast to Jewish and Pagan religious ideas. Two units; second semester. (Hill.)

**21. The Genesis of Missions.** A study of the nature, universality and purpose of religion, and a comparison of Christianity with the non-Christian religions. The spread of Christianity throughout the Graeco-Roman world, with special attention given to the difficulties which confronted the early church; followed by a survey of the missionary movements which resulted in the winning of Northern Europe. Lectures, reports, and readings. Two units; first semester. (Taylor.)

**22. The Modern Progress of Christianity.** A study of Christianity since the Reformation. The development of the missionary movements of Protestantism from the time of the Pietists and Moravians to present-day missionary organizations, followed by a study of Christianity in its world-wide reach. Lectures, assignments and paper. Two units; second semester. (Taylor.)

**23. Missions in the Far East and the Pacific Islands.** (a) **The Evolution of China.** A study of the physical, historical, social and religious view-points, and of the missionary problems, methods and results. (b) **The New Japan.** A study of the rapid rise of Japan out of the feudal conditions, and a

survey of the history and present problems of Christian missions. (c) **The Pacific Islands.** A study of the Christian forces in the Philippines and the Pacific Island groups. Two units; first semester. (Taylor.)

**24. Missions in India, Moslem Lands, Africa and Spanish-America.** (a) **The Awakening of India.** A study of the history of the Indian peoples, followed by a survey of Christian missions, their problems and work. (b) **The Mohammedan World.** A study of Mohammedanism as a force in the world today. Special use is made of the Koran. (c) **The Redemption of Africa.** A study of the physical and racial problems and of the pagan peoples. (d) **The Rise of Spanish-America.** A study of the aboriginal races of the Americas, the Spanish conquest, the colonial and war periods, and present-day struggles in South America and Mexico. This course is concluded by a study of the history and problems of Protestant missions. Two units; second semester. (Taylor.)

**30. Church History.** Given in Maclay College of Theology. Two units. (Knoles.)

#### UPPER DIVISION COURSES

**100. Israel's Wisdom and Poetic Literature.** An advanced course in the wisdom, literature and poetry of Genesis, Deuteronomy, Proverbs, Job, Psalms, etc., from the literary and ethical points of view. Two units; first semester. (Knopf.)

**101. Hebrew Doctrines, Institutions, Typology.** This course sets forth the progressive development of the elementary teachings of the Old Testament as to God, man, sin, salvation, the future life, the kingdom of God; and includes a study of rites, types, institutions, and codes. Not given in 1915-16. Two units; second semester. (Knopf.)

**110. The Teachings of Jesus in the Gospels.** A critical study of Jesus' utterances as to his authority, ruling ideas, ethical claims, social program, growing self-consciousness, and views on sin, salvation, death, the future, etc. Two units; first semester. (Hill.)

**111. Christian Doctrines, Institutions, Typology.** A series of inductive studies in the New Testament records (Gospels and Epistles) to determine the meaning and content of doctrines, institutions, and types found therein. Not given in 1915-16. Two units; second semester. (Hill.)

**112. The Messianic Hope.** Its appearance in Mithraism and other Oriental Religions, its development and fulfillment in Hebraism and Christianity. Two units; both semesters. (Knopf.)

**113. New Testament Exegesis.** Given in Maclay College of Theology. Two hours; throughout the year. (Healy.)

**120. Religious Pedagogy.** A course designed to fit the student for teaching Bible classes in Sunday Schools, teacher-training courses, etc. The teacher, his work, qualifications and preparation; the student, his physical, mental, and moral nature; the lesson; the teacher's approach to the student; etc. Two units; first semester. (Montgomery.)

**121. The Modern Organization of the Church.** The Sunday School, Young People's Societies, various types of church organization; duties of various officers, committees, etc. A course designed to fit for more efficient lay service in the church. Two units; second semester. (Montgomery.)

**130. The Early English Bible.** The Gospels and Psalms in West Saxon. For description see announcement of the College of Theology. Two units; throughout the year. (Dixon.)

**140. Charities.** See Sociology. Two units; second semester. (Kenngott.)

**141. Social Ethics.** See Sociology. Two units; throughout the year. (Kenngott.)



142. **The Social Message of the Gospel.** Not given in 1915-16. Two units. (Montgomery.)

#### GRADUATE COURSES

200. **Seminar in Relation to Religion and Social Questions.** See Sociology 2. Two units; throughout the year. (Bogardus.)

201. **Methods in Social Surveys.** See Sociology 2. Two units; either semester. (Bogardus.)

**Secretarial Course.** Designed to fit for secretarial work in Young Men's and Young Women's Christian Associations and similar organizations. This is a three-year course leading to a certificate, by taking a fourth year and satisfying the complete major requirements the degree of Bachelor of Arts may be secured. The following courses are required:

	Units
Religious Education, 1, 2, 10, 11, 21, 30, 110, 120, 121, 140, 141.....	22
General College Requirements, including Economics .....	32 to 42
Sociology, 100, 101, 103, 106, 118.....	15
Philosophy, 103, 121.....	4
General Biology, 1, 2.....	4
Electives .....	15 or 5
Total .....	92

**Major Work:** For Bachelor degree, 30 units, at least half of which must be in upper division work.

**Minor Work:** Ten units, at least four of which must be upper division work.

**SOCIOLOGY**

EMORY S. BOGARDUS, ROCKWELL D. HUNT, Professors  
GEORGE F. KENNGOTT, Associate  
HARRY J. McCLEAN, Lecturer  
RALPH E. DAVIS, ROSCOE L. FRASHER, Assistants

LOWER DIVISION COURSES

**1. Introduction to Sociology.** A comprehensive study of social progress, with frequent application to concrete conditions. The year's work closes with a summary of social progress. The course is intended to serve as an introduction not only to other courses in Sociology but also to the other social sciences. Two units; throughout the year. (Bogardus.)

UPPER DIVISION COURSES

**100. Principles of Sociology.** An introductory course for upper division and graduate students. A fundamental course presenting an analytical study of social life and the forces of its orderly development, intended to lay substantial foundation for more advanced work. A good knowledge of history and an acquaintance with biology and psychology are desirable. Three units; first semester. (Bogardus.)

**101. Municipal Problems.** A study of the main problems affecting urban life. Includes special lectures by leading practical experts. (Same as Economics 101). Three units; first semester. (Hunt.)

**102. Labor Problems.** A discussion of the leading problems confronting men and women engaged in industry. (Same as Economics 102.) Three units; second semester. (Hunt.)

**103. Immigration.** The course begins with a study of the general causes of migration in the world's history. It considers the European backgrounds of immigration to the United States, and the problems which the immigrant faces

when he attempts to adjust himself to a new and strange environment. Attention is given to the history of immigration to the United States, with special emphasis on present-day immigration problems. The course closes with a study of the foreign races in Southern California, and of the problems likely to arise. Three units; second semester. (Bogardus.)

**104. Charities.** Begins with studies in the nature, extent, and causes of poverty. Examines the organization of charity and the supervision of public and private agencies, including social settlements, etc. The various socially defeated classes are considered. Remedial measures are treated and emphasis is placed upon methods of prevention. The class visits charitable institutions in Los Angeles and the vicinity. Two units; first semester. (Kenngott.)

**106. Social Insurance.** A survey of contemporary social problems with special reference to the principles and methods of social amelioration, followed by a comparative study of certain preventive and constructive measures of leading countries. An examination of both the theory and experience in provision for accident, invalidity, old age and other forms of social insurance. Two units; second semester. (Kenngott.)

**108. The Liquor Problem.** A discussion of the economic and social phases of the liquor problem. (Same as Economics 108.) One unit; throughout the year. (Hunt.)

**109. The Theory of Play.** A study of the nature, function, and need of play from psychological and sociological standpoints. (Same as Physical Education 109.) Three units; first semester. (LaPorte.)

**110. Social Ethics 1 and 2.** During the first semester ethical theories are examined in relation to the social questions and foundations are laid for intensive study of American social conditions. The second semester's work has more particular reference to practical applications. Social and industrial life

is subject to the criteria set by a societary point of view. Two units; throughout the year. (Kenngott.)

**112. Social Legislation.** The basic theory of social legislation. The technique for securing social legislation. A consideration of social legislation now operative with special attention to needed measures. Two units; first semester. (McClean.)

**114. Criminology.** A study of crime from sociological and psychological points of view. Special attention is given to methods for the prevention of crime. Some of the topics considered are: History of methods of punishment, prison systems, prison reform, probation, juvenile court, the George Junior Republic idea, juvenile self-government. Two units; second semester. (Bogardus.)

**115. Social Surveys.** Social surveys of leading field problems are undertaken. Training in methods is given. Literature on subject is considered. The work may serve to open the way to permanent positions in social service work. Two units; throughout the year. (Bogardus.)

**118. Rural Sociology.** The course takes up the Country Life movement. It treats of leading rural problems, such as the rural church, the rural school, rural social organizations. One unit; second semester. (Bogardus.)

**120. Social Psychology.** Based on assigned readings in Ross, McDougall, Baldwin, Cooley, and others. The social instincts, the development of the self, the social nature of the self. Imitation, custom imitation, fashion imitation. Suggestibility, the crowd, the mob, formation of permanent groups, group conflicts, group leadership, group consciousness. The formation of public opinion, its fundamental part in maintaining group stability and in securing group advancement. Two units; first semester. (Bogardus.)

## GRADUATE COURSES

**200. Seminar in Sociology.** An advanced course, primarily for graduates, in which the student makes practical application of his previous sociological studies. After inquiry into the historical as well as the present status of some leading social problem, both from European and American points of view, the student investigates the concrete local phases of the same question and presents results. Considerable time is given to field work and stress is placed upon original research. Two units; throughout the year. (Bogardus.)

**201. Seminar in the Relation of Religion and Social Questions.** Designed to meet the needs of a limited number of religious and social workers and other graduates showing adequate preparation for advanced work in applied sociology. Candidates should make application to the director or to the department. Two units; throughout the year. (Kenngott.)

**205. History of Sociology.** A history of social thought since earliest times. A comparative study of the early social writers, and of the leading sociologists of the nineteenth century and of the present day. Extensive library work and frequent reports are among the requirements. Two units; second semester. (Bogardus.)

**Major Work in Sociology:** Thirty semester units, including Economics 1.

**Minor Work in Sociology.** Ten semester units in addition to course 1 or 2.

**High School Teacher's Recommendation:** An undergraduate "major" course, followed by at least seven units of graduate work in Sociology. The entire course must include: Economics, Course 1, Principles; and the following courses in Sociology: 1, Introductory, or 100, Principles; 103, Immigration; 104, Charities, or 106, Social Insurance; 120, Social Psychology; 200, Seminar in Sociology or 201 Seminar in the Relation of Religion and Social Questions; 205, History of Sociology.



**SPANISH**

KATHERINE T. FORRESTER, ROY E. SCHULZ, Professors  
JULIUS ZIEGNER-URIBURU, Lecturer  
MARIA DE G. LOPEZ, Instructor

LOWER DIVISION COURSES

**1a. Elementary Spanish.** The essentials of Spanish grammar, with careful drill in pronunciation, reading and writing. Five units; either semester. (Schulz.)

**1b.** A continuation of 1a. Five units; either semester. (Schulz.)

**Note**—Not more than five units of Spanish 1 A-B can be credited toward a major course in Spanish.

**2. Advanced Spanish.** The selections in Hill's and Reinhardt's "Spanish Short Stories" are read and discussed in class. Advanced grammar and composition, with Ramsey's "Grammar" as a guide. Three units; first semester. (Forrester.)

**3. Advanced Reading and Composition.** Selections from "Don Quixote" are read with a view to familiarizing the student with typical characteristics in Spanish literature. Collateral reading of selection from "Gil Blas," with reports in Spanish. Advanced grammar and composition. Three units; second semester. (Forrester.)

**4. Spanish Conversation.** An attempt is made to gain a working knowledge of colloquial Spanish on the basis of text books and Spanish magazines. Two units; throughout the year. (Forrester.)

**5. Commercial Spanish.** An attempt is made to gain a business vocabulary and a knowledge of business forms. Two units; second semester. (Forrester.)

**6. Coaching Course.** A review of forms and syntax. Intended primarily for teachers. Two units; both semesters. (López.)

## UPPER DIVISION AND GRADUATE COURSES

**106. Modern Novels and Drama.** Selections from the works of important novelists and dramatists are read and discussed in class and as collateral work, with reports in Spanish. Advanced composition. Three units; first semester. (Forrester.)

**107. Modern Novels and Drama.** A continuation of course 106 with special reference to Spanish life and the Spanish viewpoint. Three units; second semester. (Forrester.)

**108. Nineteenth Century Literature.** A special study of one or more authors. During 1915 a study was made of Becquer's life and works. Two units; second semester. (Schulz.)

**109. Lyric Poetry.** A rapid survey of Spanish Lyric Poetry, using Ford's "A Spanish Anthology" as a text. Two units; first semester. (Schulz.)

**111. The Drama of the Golden Age.** A critical study of the period, with the reading and discussion of selections from Lope de Vega, Calderó, and Tirso de Molino. Two units; first semester. Alternates with 109; not given 1916-1917. (Forrester.)

**112. Modern Drama.** A study of modern and contemporary Spanish Drama with selections from prominent authors. Two units; second semester. Alternates with 110; not given 1916-1917. (Forrester.)

**113. Advanced Composition.** The translation of long selections, with particular attention to idioms and style. Two units; first semester. (Forrester.)

**114. Current Events.** Discussions in Spanish of current events with particular reference to Spain and Spanish America. One unit; both semesters. (Forrester.)

**115. History of Spanish Literature.** A rapid survey of Spanish Literature. Required of all major students. Two units; second semester. (Schulz.)

**Primarily for Graduates**

**214. Teacher's Course.** A study of methods of presenting the four-year high-school course in Spanish, with demonstrations and practice in the University High School. Two units; first semester. (Schulz.)

**215. Cervantes' "Don Quixote."** A study of Cervantes' masterpiece. One unit; first semester. (Forrester.)

**216. Spanish Ballads.** A study of the Spanish romancero, using Morley's "Spanish Ballads" as a text. Collateral reading of Pidal's "El Romancero." One unit; second semester. (Forrester.)

**217. Old Spanish.** A study of the development of the Spanish language in the earlier period of its history. The equivalent of at least two years of preparatory Latin is a prerequisite. Two units; second semester. (Schulz.)

**Major Work.** Thirty semester units, including courses 113 and 115 and of which only five units may be from course 1A-B.

**Minor Work.** Ten semester units exclusive of course 1.

**High School Teacher's Recommendation.** Thirty semester units, including courses 113, 115 and 214, of which only five units may be from course 1A-B.

# COURSES IN ENGINEERING

## ARCHITECTURE

A four years' course in the theory and practice of architectural planning and composition, the history and the development of its classic forms and a study of the methods of structural design.

### Required Course in Architecture

#### First Year

	Units. 1st Sem.	Units. 2nd Sem.
Mathematics, 4, 5, 6.....	4	5
English, 1 .....	3	3
Drawing, 2—Architectural Shades and Shadows .....	2	
Drawing, 3—Architectural Perspective....		2
Art and Design, 1, 2—Freehand Drawing	1	1
Art and Design, 3—Watercolor .....		1
Art and Design, 5, 6—Outdoor Sketching	1	1
Art and Design, 7—Pure Design.....	1	---
Architecture, 3 .....	2	2
Architecture, 8 .....	1	1

#### Second Year

	1st Sem.	2nd Sem.
Mathematics, 7, 108.....	3	3
Physics, 2, 3, 6, 7.....	6	6
Drawing, 6—Descriptive Geometry.....	2	2
Art and Design, 4—Drawing from Life....		1
Civil Eng., 13—Materials of Construction	3	---
Architecture, 4 .....		2
Architecture, 5 .....	2	2
Architecture, 15 .....	2	2

**Third Year**

	1st Sem.	2nd Sem.
Civil Eng., 107—Mechanics .....	3	2
Civil Eng., 108—Strength of Materials....	2	3
Civil Eng., 115—Graphic Statics .....	2	....
Civil Eng., 116—Stresses .....	....	3
Civil Eng., 118—Structural Design.....	....	2
Architecture, 6 .....	2	2
Architecture, 10 .....	....	2
Architecture, 11 .....	2	....
Architecture, 12 .....	2	....
Architecture, 16 .....	3	3

**Fourth Year**

	1st Sem.	2nd Sem.
Civil Eng., 118—Structural Design.....	3	3
Civil Eng., 121—Reinforced Concrete.....	3	3
Civil Eng., 122—Contracts and Specifica- tions .....	....	1
Architecture, 17 .....	6	6
Architecture, Thesis .....	3	3

**Courses in Architecture**

**3. Architectural Drawing.** A course in lettering, large scale detailing and the preparation of working drawings for small buildings. Two units; throughout the year.

**4. Architectural Drawing.** A continuation of course 3, including construction details for large buildings. Two units; second semester.

**5, 6. History of Architecture.** A course tracing the development of building from the Egyptian period to modern times. Lectures and sketch problems. Two units; throughout two years.

**8. Elements of Architecture.** A study of the elements of the best examples of Classical Architecture and practice in rendering and simple designing. One unit; throughout the year.



**10. Heating and Ventilating.** The theory and practice of warming and ventilating buildings, including a study of the various heating systems. Two units; second semester.

**11. Building Illumination.** A course in methods of lighting, electric lamps and other illuminants, wiring, etc. Two units; first semester.

**12. Sanitation.** Systems of water supply, sewage disposal, plumbing and fixtures. Two units; first semester.

**15. Elementary Design.** Sketch and rendered problems involving simple composition. Library research work. Two units; throughout the year.

**16. Intermediate Design.** A continuation of course 15. Three units; throughout the year.

**17. Advanced Design.** Extended problems in original design. Six units; throughout the year.

## CIVIL ENGINEERING

CHARLES W. LAWRENCE, Professor

C. W. COOK, Associate Professor

H. L. BRIGGS, C. W. SPOTTE, R. N. McMASTER, Field Assistants

The great industrial development of recent years in every part of the United States has created a large demand for trained civil engineers. The course in Civil Engineering has been made broad in order to meet this demand by providing a sufficient foundation for the wide range of practice now included under Civil Engineering.

Very few college students know in what part of this wide field their life work will lie. Because of this, and the great difficulty of mastering fundamentals during the stress of professional work, it has seemed best to provide a broad university preparation and to defer specialization to the period of active employment.

The course is designed to give a practical as well as a theoretical training. Nearly as much time is spent in the drawing room, laboratory and field as in the lecture room.

By consulting the schedule following, it will be seen that considerable time is devoted to Mathematics, English, and the Sciences. Of the more technical work, Field Engineering is given very full treatment in lecture room, office and field.

In the third year Theoretical Mechanics is thoroughly developed and forms the basis for the designing and construction that occupy the remainder of the course. The importance of correct methods of thought and practice is constantly insisted upon.

A very large amount of important engineering work is continually going on in the vicinity of Los Angeles. The proximity of harbors, mines, irrigation and water supply projects, several transcontinental railroad terminals, and extensive electric power plants and railway systems, offers a diversity of excellent examples of engineering construction. Students in this department, accompanied by instructors, are required to inspect much of this work and to present written reports on what they have seen.

## REQUIRED COURSE IN CIVIL ENGINEERING

### First Year

#### FIRST SEMESTER

	Lab. Hours.	Class Hours.
Mathematics, 4, 5—Algebra and Trigonometry.....	....	4
Chemistry, 2—Qualitative Analysis .....	....	3
Chemistry, 2a .....	6	....
Civil Engineering, 1—Surveying Theory .....	....	2
Civil Engineering, 2—Field Work .....	6	....
Drawing, 4 .....	6	....
English, 1 .....	....	3

	SECOND SEMESTER	Lab.	Class
		Hours.	Hours.
Mathematics, 6—Analytical Geometry.....	.....	.....	5
Chemistry, 3 .....	.....	.....	3
Chemistry, 3a .....	6	.....	.....
Civil Engineering, 1.....	.....	.....	2
Civil Engineering, 2.....	6	.....	.....
English, 1 .....	.....	.....	3
Drawing, 5 .....	6	.....	.....

### Second Year

#### FIRST SEMESTER

Mathematics, 7—Differential Calculus.....	.....	3
Geology, 2—Mineralogy .....	.....	2
Civil Engineering, 13—Materials.....	.....	3
Drawing, 6—Descriptive Geometry.....	3	1
Physics, 2-3—Mechanics .....	3	3

#### SECOND SEMESTER

Mathematics, 108—Integral Calculus.....	.....	3
Geology, 2 .....	.....	2
Civil Engineering, 3—Advanced Surveying.....	6	2
Drawing, 6—Descriptive Geometry.....	3	1
Physics, 6-7—Electricity .....	3	3

### Third Year

#### FIRST SEMESTER

Civil Eng., 107—Analytical Mechanics .....	.....	3
Civil Eng., 108—Mathematics of Materials.....	.....	2
Civil Eng., 115—Graphical Statics .....	3	.....
Civil Eng., 104—R. R. Engineering Theory.....	.....	2
Civil Eng., 105—R. R. Engineering Practice.....	6	.....
Elect, Eng., 4—Steam Engineering .....	.....	2

## SECOND SEMESTER

Lab. Class  
Hours. Hours.

Civil Eng., 107.....	2	
Civil Eng., 108.....	3	
Civil Eng., 116—Stresses.....	3	
Elect. Eng., 5—Steam Engineering.....	2	
Civil Eng., 109—Hydraulics.....	3	
Civil Eng., 105-106—R. R. Engineering.....	3	2
Civil Eng., 118—Structural Design.....	6	---

## Fourth Year

## FIRST SEMESTER

Civil Eng., 121—Reinforced Concrete .....	3	2
Civil Eng., 118—Structural Design .....	6	1
Geology, 105 .....		2
Mathematics, 112—Astronomy .....		2
Civil Eng., 111—Water Supply .....		2
Civil Eng., 112—Sanitary Engineering .....		2
Civil Eng., 110—Irrigation Engineering .....		1
Economics, 1 .....		3
Civil Eng., 123—Thesis .....	3	---

## SECOND SEMESTER

Civil Eng., 118.....	6	---
Geology, 105 .....		2
Mathematics, 112 .....		2
Civil Eng., 121—Reinforced Concrete .....	3	2
Civil Eng., 122—Contracts and Specifications.....		1
Civil Eng., 119—Highway Engineering .....		2
Civil Eng., 123—Thesis .....	6	---
Economics, 1 .....		3

**COURSES IN CIVIL ENGINEERING**

**1. Surveying.** Recitations and lectures on the theory and practice of plane surveying. The course includes the use and care of instruments; methods of procedure and of keeping notes for land, city, and mining surveys; instruction in computation and platting of field notes. Prerequisite, a course in plane trigonometry. Two units, throughout the year. Text, Breed and Hosmer's "Principles and Practice of Surveying," Vol. 1. (Cook.)

**2. Surveying Field Work.** The practical adjustment of surveying instruments; the proper method of keeping clear field notes, and the working of field problems with chain, tape, level, plane table, transit, compass, etc. The work in the drawing room consists of platting the field notes and making profiles and maps. Six hours, two units, throughout the year, course 1 to be taken concurrently. Text, "Pence and Ketchum's Field Manual." (Cook.)

**3a. Higher Surveying.** Recitations and lectures on the theory and practice of the more advanced surveying problems, including hydrographic surveying, and mapping. Prerequisite, courses 1 and 2. Two units; second semester. Text, Breed and Hosmer, Vol. II. (Cook.)

**3b. Higher Surveying, Field Work.** Topographical surveys with plane table and stadia, city surveys, mine surveys, measurement of base lines and triangulation systems, determination of meridian and latitude. Prerequisite, courses 1 and 2. Six hours' field work, two units. (Cook.)

**13. Materials of Construction.** A study of the manufacture and properties of stones, cements, concretes, timber, iron, steel, etc., with special attention to the determination of the safe working stresses. Three units; first semester. Text, Mills' Materials of Construction." (Cook.)

**104. Railroad Engineering.** A course including the theory of curves, switches, and sidings; the making of reconais-



sances and preliminary and location surveys; the computation of earthwork and determination of structures; and the making of final estimates of cost. Prerequisites, courses 1 and 2. Two units; first semester. Text, "Allen's Railroad Curves and Earthwork." (Cook.)

**105. Railroad Engineering, Field and Office Work.** Practice in laying out curves, making a complete survey for a short line of railway, and doing the office work. Course 4 must be taken concurrently. Eight hours, three units, first semester; three hours, one unit, second semester. Text, "Allen's Railroad Curves and Earthwork." (Cook.)

**106. Economics of Railroad Location.** The fundamental principles of economical location, construction and betterment surveys; a discussion of yard and terminal design; the study of the permanent right of way in regard to its relation to maintenance and operation. Prerequisite, course 4. Two units; second semester. Text, "Raymond's Railroad Engineering." (Cook.)

**107. Analytical Mechanics.** The mathematical treatment of statics, kinematics and dynamics, including the determination of center of gravity, moment of inertia, centrifugal force, etc. Prerequisite, Mathematics 8 and 9. Three units, first semester; two units, second semester. Text, "Hancock's Applied Mechanics for Engineers." (Lawrence.)

**108. Mathematics of Materials.** A mathematical course in the resistance and elasticity of materials, stresses and strains, shearing, flexure, beams, columns, and shafts. Course 7 must be taken concurrently. Two units, first semester; three units, second semester. Texts, Slocum and Hancock's "Strength of Materials," and Shepard's "Problems in Strength of Materials." (Cook.)

**109. Hydraulics.** Hydraulic pressure, strength of pipes, flow of liquids through pipes and orifices and over weirs, losses of head, flow of water in open channels, dams of masonry and earth, hydraulic motors and machinery. Prerequisite, course 7. Three units, second semester. Text, Slocum's Hydraulics." (Lawrence.)

**110. Irrigation Engineering.** Diversion, conveyance, and application of water for irrigation. Design of reservoirs, dams and diversion works. One unit; first semester. Text, Newell and Murphy's "Irrigation Engineering."

**111. Water Supply.** The determination of the quantity and quality of supply, water purification and conservation, design of a system. Prerequisite, course 9. Two units; first semester. Text, Turneure and Russel's *Public Water Supplies*. (Lawrence.)

**112. Sanitary Engineering.** The drainage of buildings, treatment and disposal of sewage, sewer systems for cities. Prerequisite, course 9. Two units; first semester. Text, "Sewage Disposal, Kinnicutt, Winslow and Pratt." (Lawrence.)

**115. Graphical Statics.** The graphical determination of the stresses in engineering structures. Course 7 must be taken concurrently. Three hours, one unit; first semester. Lectures and Drafting. (Lawrence.)

**116. Stresses in Framed Structures and Arches.** The analytical and graphical methods applied to determining stresses in roof and bridge trusses and masonry arches. Prerequisite, course 15. Three units; second semester. Text, Turneure's *Modern Framed Structures*, Vol. I. (Lawrence.)

**117. Engineering Laboratory.** The testing of engineering materials. Prerequisite, course 13. Three laboratory hours, one unit; first semester. Work done at the Osbourn Testing Laboratory (by special arrangement).

**118. Structural Design.** The theory for and practice of making complete designs for steel bridges, roofs and other structures. Lectures, drawing, and computing. Prerequisite, courses 8, 13 and 16. One hour lecture, six hours drafting, three units. Text, "Modern Framed Structures," Vol. III. (Lawrence.)

**119. Highway Engineering.** Roads and streets of broken stone, paved and oiled roads, the location of new roads. Two

units; second semester. Text, "Baker's Roads and Pavements." (Lawrence.)

**121. Reinforced Concrete.** The theory, design, construction and estimates of concrete and reinforced concrete structures, including buildings, foundations, retaining walls, tunnels, culverts, dams. Two hours lecture, three hours designing, three units; throughout the year. Text, Hool's "Reinforced Concrete Construction," Vols. I and II. (Cook.)

**122. Contracts and Specifications.** A synopsis of the law of contracts as applied to engineering construction and a study of typical contracts and specifications. The course includes riparian rights, boundary lines, survey descriptions, etc. One unit; second semester. Text, Tucker's "Contracts in Engineering." (Lawrence.)

**123. Thesis.** A study of some special engineering problem or an independent investigation by the student. The subject must be approved by the professor in charge of the department of Civil Engineering and by the professor who would have immediate direction of the work proposed, not later than November 1st of the senior year. It must be completed and submitted by June 1st of the same year. One unit, first semester; two units, second semester. (Lawrence.)

**218. Structural Engineering.** The theory and design of continuous girders, swing, cantilever, suspension of metallic arch bridges. Two units, each semester. Text, "Modern Framed Structures," Vol. II. (Lawrence.)

**221. Advanced Reinforced Concrete.** The theory and design of reinforced concrete bridges, arches, tunnels and chimneys. Two units credit. Text, Hool's "Reinforced Construction," Vol. III. (Cook.)

**224. Theory and Method of Least Squares.** The application of the laws of errors to the adjustment of observations. Two units, one semester. Text, Merriman's "Theory and Practice of Least Squares." (Lawrence.)

**ELECTRICAL ENGINEERING**

**ARTHUR W. NYE, J. H. MONTGOMERY, Professors**  
**AUGUST HUND, Assistant Professor**

The courses offered in this department are designed to fit young men to engage in the operation and production of electrical apparatus, and also in the application of electricity to the Arts and Sciences.

During the freshman and sophomore years there is laid a broad foundation, consisting of Physics, Mechanics, Chemistry, Surveying, and Drawing. During the junior and senior years special studies in electricity and applied electricity are pursued. These involve the theory of electricity and magnetism with application to direct-current machines and measuring instruments, and alternating-current machinery and apparatus, comprising alternators, synchronous and induction motors, transformers and rotary converters. Courses are also given in Electrical Distribution and Transmission, Illuminating Engineering and Hydraulic Engineering.

The work of the engineering laboratories is co-ordinate with that of the lecture and class room, and aims to give a practical knowledge of electrical measurements and the handling of electrical machinery.

Southern California, in its present state of rapid development, offers exceptional opportunity to the hydraulic and electrical engineer. The work of the University is excellently supplemented by the large amount of work under construction. The engineers and superintendents in charge of these have been very courteous in aiding the classes on their various trips of inspection. The various power and electric plants in and about Los Angeles afford examples of electric development of high-tension and power transmission not surpassed by those of any other city in the United States. Various excursions are made to these plants, which are explained in detail by the superintending engineers.

## REQUIRED COURSE IN ELECTRICAL ENGINEERING

## First Year

## FIRST SEMESTER

	Lab. Hours.	Class Hours.
Mathematics, 4, 5—Algebra, Trigonometry.....	....	5
Drawing, 4 .....	6	....
Physics, 2—Mechanics .....	....	3
Physics, 3 .....	3	....
English, 1 .....	....	3
Civil Eng., 1—Surveying, Theory .....	....	2
Civil Eng., 2—Surveying, Field .....	3	....

## SECOND SEMESTER

Mathematics, 6—Analytical Geometry.....	....	5
Drawing, 5 .....	6	....
Physics, 6—Electricity .....	....	3
Physics, 7 .....	3	....
English, 1 .....	....	3
Civil Eng., 1.....	....	2
Civil Eng., 2.....	3	....

## Second Year

## FIRST SEMESTER

Physics, 4, 5—Heat.....	3	2
Physics, 21—Shop .....	3	....
Elect. Eng., 4—Steam Engineering.....	....	2
Civil Eng., 13—Materials.....	....	3
Mathematics, 7—Differential Calculus.....	....	3
Drawing, 6—Descriptive Geometry.....	3	1
Chemistry 2—Qualitative Analysis .....	....	3
Chemistry, 2a .....	6	....



	SECOND SEMESTER	Lab.	Class
		Hours.	Hours.
Physics, 8, 9—Light .....	3	2	
Physics, 21—Shop .....	3		
Elec. Eng., 5—Steam Engineering.....			2
Physics, 16—Electricity .....			2
Chemistry, 3 .....			3
Chemistry, 3a .....	6		
Mathematics, 108—Integral Calculus.....			3
Elec. Eng., 111—Workshop Mechanics.....			1
Physics, 17—Physical Measurements.....	3		

### Third Year

#### FIRST SEMESTER

Elect. Eng. ....		5
Physics, 105—Electrical Measurements.....	6	
Civil Eng., 107, 108—Mechanics.....		5
Physics, 114—Thermodynamics .....		1
Elec. Eng., 106—Excursions.....	2	
Physics, 112—Illumination .....		3

#### SECOND SEMESTER

Elec. Eng. 101a.....		5
Elec. Eng., 102—Dynamo Laboratory.....	6	
Civil Eng., 107, 108—Mechanics.....		5
Elect. Eng., 106—Excursions.....	2	
Drawing, 7—Machine Design .....		3

### Fourth Year

#### FIRST SEMESTER

Elec. Eng., 103a—Alternating Currents .....		5
Elect. Eng., 107—Dyn. Lab. A. C. Mach.....	6	
Elect. Eng. 108—Theory of Electricity.....		2
Elect. Eng., 112—Thesis .....	3	
Economics, 1 .....		3
Elec. Eng., 106—Excursions.....	2	

## SECOND SEMESTER

Elect. Eng., 103b—Alternating Currents .....	3
Elect. Eng., 109—Electric Railroads .....	2
Elect. Eng., 107—A. C. Lab.....	6
Civil Eng., 109—Hydraulics.....	3
Elect. Eng., 112—Thesis.....	3
Economics, 1 .....	3
Elect. Eng., 106—Excursions .....	2
Elect. Eng., 110—Transmission .....	2

## COURSES IN ELECTRICAL ENGINEERING

## LOWER DIVISION COURSES

**4. Steam Engineering.** Boilers, combustion, fuels, laws of gases and heat-conduction, corrosion and scale, testing, flow of steam in pipes, etc. Practical apparatus as used in steam power plants. Two units; first semester. (Nye.)

**5. Steam Engineering.** A study of various types of steam turbines and steam engines, indicator cards, valve motions and diagrams, multiple expansion, design of parts. General layout of plants. Two units; second semester. (Nye.)

## UPPER DIVISION COURSES

**101a. Dynamo Electric Machinery.** This course comprises a study of the theory and operation of direct-current generators and motors. Text: "Elements of Electrical Engineering," Vol. 1, by Franklin and Esty. Five units; first semester. (Nye.)

**101b. Dynamo Electric Machinery.** This course comprises a study of electric distribution and lighting and the elementary principles of Alternating Currents. Five units; second semester. (Nye.)

**102. Dynamo Laboratory.** Study is made of the performance of direct-current machines by means of their characteristic curves; efficiency, regulation, and heat tests are run; and various methods of operating generators and motors and their auxiliary control apparatus are studied. Junior year. Six hours, two units; second semester. (Hund.)

**103a. Alternating Currents.** A mathematical study of the theory and applications to modern machinery. Study of text and lectures. Text: "Alternating Currents and Alternating Current Machinery," by Jackson. Five units; first semester. (Montgomery.)

**103b. Alternating Currents.** Continuation of 3a. Three units; second semester. (Montgomery.)

**106. Excursions.** Trips to various power plants and factories with a view to observing methods and processes. Written reports required of students.

**107. Dynamo Laboratory.** Tests and study of alternating current apparatus. Senior year. Six hours, two units; throughout the year. (Hund.)

**108. Theory of Electricity.** The electrical units and their dimensions; laws of circuits; theories of electric conduction in solids, gases, and electrolytes; valve actions; etc. Two units; first semester. (Hund.)

**109. Electric Railroads.** Railway engineering, power-plant engineering, water-power installation, economics of electrical engineering, etc. Two units; second semester. (Montgomery.)

**110. Transmission and Station Equipment.** A study of the commercial problems of electric-power generation and distribution, and of standard polyphase machinery. Two units; second semester. (Nye.)

**111. Workshop Mechanics.** A consideration of the materials of machine construction, of the methods of working them, and of workshop appliances. Lectures, no credits, but

required of all graduates in Electrical Engineering. (Montgomery.)

**112. Thesis.** An original investigation and study of some special problem.

Only senior students who show themselves peculiarly fitted to undertake this work will be allowed to enroll for it. Other students will take Physics 202 and 203 in lieu of Thesis.

**Note**—For courses in Electrical Engineering that can be accepted toward the degree of Bachelor of Arts, see Engineering Courses in Arts.

Graduate courses in Electrical Engineering are under consideration and will be given in 1916-1917 if there is sufficient demand. Prospective students should communicate with the head of the department in regard to them. These courses will probably deal with Transient Phenomena and High Frequency Phenomena.

## **MINING AND CHEMICAL ENGINEERING**

**LAIRD J. STABLER, L. S. WEATHERBY, Professors**

The University is at present offering two years of the course in Mining and Chemical Engineering. The work, as outlined, gives thorough training in the fundamental subjects of mathematics, chemistry, physics, drawing, and the elements of engineering. The foundation laid in the two years prepares the student to enter any of the good mining colleges, and complete the work of the Junior and Senior years, specializing in Mining and Metallurgy.

Students who desire to complete their full course at this University may, by satisfying the requirements in Liberal Arts, select their further courses from the Department of Chemistry, and from the engineering courses for which credit is given in Liberal Arts, and be graduated as majors in Chemistry.

**Courses in Mining or Chemical Engineering****Freshman Year**

	First Semester	Second Semester
English, 1 .....	3	4
Mathematics, 4, 5, 6.....	5	5
Chemistry, 2, 2a, 3, 3a.....	5	5
Civil Engineering, 1 .....	2	2
Civil Engineering, 2 (Field Work).....	2	2
Drawing, 4, 5.....	2	2

**Sophomore Year**

Mathematics, 7, 108—Calculus.....	3	3
Geology, 3—Ores and Metals.....	2	2
Drawing, 3—Elements of Perspective.....	1	1
Drawing, 6 .....	3	3
Physics, 2, 3, 6, 7.....	6	6
Chemistry, 4, 108.....	4	4

**Note**—For courses in Mining and Chemical Engineering that can be accepted toward the degree of Bachelor of Arts, see **Engineering Courses in Arts**.



## GENERAL INFORMATION

The College of Liberal Arts of the University of Southern California is situated in Los Angeles, about three and one-half miles southwest from the business section of the city. The College buildings are accessible by three lines of street cars, the West Jefferson Street, the University, and the Pacific Electric lines. This is one of the most beautiful and rapidly growing residence sections of Los Angeles.

### EQUIPMENT

**The Library** is housed in the main building of the University. The reference room contains the general reference books, the bound magazines, and a carefully selected list of current periodicals. The stack room contains the circulating books. There are also three large study-rooms, two on the main floor in the North Annex, the other for the High School students on the second floor.

All officers, students, and graduates of the University have free access to the library and may draw books for home use. The shelves are open to members of the Faculty and, upon recommendation of their major professors, to students engaged in advanced work.

The Library contains over eighteen thousand volumes, exclusive of unbound pamphlets, and also the Dean Cochran Memorial Library of over two thousand volumes placed in the University by his son, George I. Cochran. Many new volumes are added each year to meet the demands of the various departments.

The Library is open five days in the week from 7:50 A. M. to 5:30 P. M., and from 7:00 to 9:00 P. M.; on Saturdays from 8:30 A. M. to 3:30 P. M.

The Los Angeles Public Library of over 150,000 volumes is a most valuable supplement to the facilities offered by the University Library, and is accessible to all students. The University Library is a depository of the Public Library, and

books as needed are brought from the Public Library for the use of the students. Books also are borrowed from public and college libraries in the state through the Los Angeles County Free Library.

**The Museum** contains an extensive collection of specimens in mineralogy and geology, which have been accumulated during the past years by donation and purchase. This collection has been classified and arranged so as to illustrate the daily work of the classes in geology and mineralogy. The Museum contains the collection purchased from Dr. Stephen Bowers; and those donated by the late Rev. C. R. Pattee, Mrs. Mary Wright, and Professor Dickinson. These private collections are especially rich in archaeological and conchological material.

All who donate specimens to this department will receive due acknowledgment on the labels.

**Physical and Electrical Engineering Laboratories.** The Departments of Physics and Electrical Engineering occupy nine rooms on the first floor of the Main Building and the Science Hall. These have been planned and equipped exclusively for the department and are well suited to the purposes for which they are used. Ample laboratory space is provided and equipped for experimental work in elementary and advanced physics, optics, photometry, electrical measurements, and direct and alternating currents and high frequency measurements.

The apparatus and instruments are modern and of the best quality. The equipment in Mechanics includes a number of excellent precision pieces by Gaertner; in Heat, apparatus by Pye of Cambridge, England; in Light, interferometer, spectrometers, prisms, gratings, etc., by Gaertner, Wilson, and Kohl.

In Electricity the equipment is especially complete. Special mention may be made of standard resistances, postoffice boxes, slidewire bridges, potentiometer by Leeds and Northrup, portable galvanometers, type H galvanometers, Thompson dynamometer, tangent galvanometers, standards of self-induction, sechometer, permeameter, and variable condensers.

There is also an unusually complete assortment of indicating meters for both direct and alternating currents, including voltmeters, ammeters, and wattmeters of various ranges, mostly made by Weston; also Whitney hot wire, Wagner induction, Hoyt torsion head, Ayrton and Perry plunger type, General Electric magnetic vane, and S. H. frequency.

The dynamo room is equipped with a number of direct and alternating current machines of various types. There is a 7.5-Kw. General Electric revolving-field alternator with special winding for various phase and voltage connections. This machine has, also, three extra rotors so that it may be run as an induction motor with squirrel-cage rotor, with an external resistance rotor, or with an internal resistance rotor. It may also be run as a synchronous motor.

The 7.5-Kw. Westinghouse double current generator may be used as a 1, 2, or 3-phase alternator, or as a 125-volt D. C. generator, or as a rotary converter.

In addition to these machines there are, also, a 1.5 Kw. Crocker-Wheeler generator, a 1.5-Kw. Edison D. C. generator, an 800-watt Westinghouse D. C. generator, a 7.5-Kw. Fairbanks-Morse 125-volt D. C. generator, Westinghouse 1 and 5-horsepower induction motors, and General Electric 1 and 3-horsepower induction motors, the latter with the phases wound in different colors and brought out to a terminal board so that various connections may be made.

The necessary rheostats, water-rheostats, transformers, controllers, and compensators are provided. Circuits run to the electrical measurements room and lecture room, and one of the motor generator sets is arranged for operation in the lecture room for demonstration purposes. A stereopticon with slides showing modern electric installations is provided.

The photometer room is equipped with a Schmidt and Haensch station-photometer of the Lummer-Brodhun contrast type, with accessories; and also with a Sharp-Millar portable photometer, standard lamps, color screen, five foot integrating globe photometer, etc.

The wireless and high frequency equipment contains one 2-Kw. high-voltage transformer, a high-capacity oscillation transformer, a high potential condenser (three units), and a

break-key for sending. The unit receiving set consists of six mineral detectors, two Fleming audions, a loose-coupled experimental detector, a tuning transformer, and two latest type condensers. There are also wave meters, hot wire meters, various types of spark gaps, several types of tuning and resonance coils, several sources of high frequency currents, etc.

In the machine shop are provided tools for repair work and training in shop practice. These include a twelve-inch engine lathe, a speed lathe, a drill press, taps, dies and drills, and bench tools for wood and metal work.

The Library contains a large number of reference books on many special subjects in Electrical Engineering and General Physics.

**The Biological Equipment.** The entire second floor of the new north wing of the main building is devoted to the biological laboratories and lecture room. The four laboratories with their 110 feet of desks facing immediately to the north, are so planned that each student has abundant light. Each student is supplied with two drawers and a microscope locker, each with Craig combination-locks. Specifically, the equipment of the four laboratories is as follows:

**The Zoological Laboratory,** 34x35 feet, contains forty-seven single desks and a large demonstration table 4x11 feet, with drawers and cupboards on each side for supplies. The laboratory is provided with an aquarium, a drip for keeping live specimens, glass cases for books, reagents and specimens, etc. Each student is furnished a compound microscope, BA 2 or BB2, dissecting instruments, and the necessary materials for dissection and study.

A Bausch and Lomb physician's type of microscope has been presented to the department by Mrs. Scherer in memory of her husband, the late Dr. Luther D. Scherer. The instrument is provided with a complete set of lenses and accessories as follows: 1-12 inch oil-immersion objective,  $\frac{1}{8}$  inch objective with compensating collar, and  $\frac{3}{4}$  inch objective, two eye pieces, substance condenser, stage micrometer, eye-piece micrometer and other accessories.

**The Botanical Laboratory** is thirty by forty-five feet. It contains forty-eight single desks with drawers and lockers, and Craig combination-locks for each; a large demonstration table; cases for herbarium specimens, books, and supplies; blackboards, sinks, aquarium, and drip. A compound microscope, dissecting instruments, and materials for study are furnished each student.

For the study of Plant Physiology the laboratory is very well equipped. This equipment consists of recently improved types of apparatus for experimental work, and includes the Cambridge Improved Auxanometer, which is self-recording; Ganong's Clinostat, Cambridge Circumnutationometer, Detmer's Gas Diffusion Apparatus, Pfeffer's Gas Apparatus, Oel's Geotropic Chambers, Freas' Osmometer, Pfeffer's Photosynthometer, Cambridge Photosynthescope, Ganong's Potometer, Cambridge Respirator, several Manometers, a self-recording Transpirometer, and a number of other pieces of apparatus for working out the processes of the living plant. For research work in Botany the latest improved microscopes with oil-immersion objectives, camera lucida, warm temperature stage, micrometers, and other accessories are provided.

The Library contains a large number of books and magazines on Botany and the latest contributions to Botanical literature.

**The Laboratory for Bacteriology and Physiology** is 29x46 feet, facing the north. It is supplied with autoclave, Arnold, and hot-air sterilizers, incubators, glassware, and all other necessary equipment for work in bacteriology. There are thirty-one single desks in this laboratory, a large demonstration table, two hoods and a cooling chamber, a sink, a tank, tables, cupboards, and a case of reagents and supplies. All the necessary materials, apparatus and instruments, including BB-8 Bausch and Lomb microscopes, are furnished the student. For Physiology the laboratory is supplied with the reagents and apparatus necessary for successful laboratory work, such as microscope, haemocytometer, dissecting instruments, etc. A complete set of the Harvard Physiological apparatus has been added. For Histology and Embryology



the student is supplied with BB-8 microscope and has the use of the Minot automatic rotary microtome, Bausch and Lomb's automatic laboratory microtome, and all reagents necessary to carry on successful work.

**The Biological Research Laboratory**, 15x17 feet, adjoins the office of the department, which is also 15x17 feet. The equipment of these rooms is such as adapts them to advanced work along special lines. The best microscopes of German and American make are available, including Bausch and Lomb, CC-8 Zeiss IIa, with achromatic and a set of apo-chromatic objectives with compensating eye-pieces. Other microscopes of the Leitz and Spencer types, imbedding baths, centrifuge, camera, and numerous microscope accessories and instruments are provided.

**The Biological Lecture Room** is 32x36 feet with raised seats. It has a seating capacity of about two hundred and is provided with skylight and fitted with screens for darkening to adapt it to the use of the electric projection apparatus and stereopticon that form part of the equipment. The lecture desk, which is fitted with drawers and cupboards, can be adjusted instantly for gas or water for demonstration purposes. This room, as well as all others, is well supplied with electric lights.

The wide halls have been provided with glass cases in which are placed a large collection of birds, mollusks, and alcoholic specimens for demonstration and study. The collection of mollusks is very complete, representing over eighteen thousand specimens.

**The Marine Biological Station of the University of Southern California** is housed in the aquarium and auditorium buildings at Venice. The research laboratory has places for eight investigators, and the combined laboratory and lecture room for the summer course in marine biology will accommodate forty students. In the large aquarium room there are forty aquaria with sides of plate glass and one large central concrete basin. A library and a reference collection of the local fauna and flora are being established.

The Venice pier and breakwater have been made a biological reservation by a special act of the Venice city trustees. Here are colonies of abalones and other animals brought from a distance for study and experimentation. One and one-half miles of canal, with water of lower salinity than the neighboring sea, give opportunity for acclimatization experiments.

In the Pacific Ocean the immediate field of investigation embraces the Santa Barbara Islands, extending from San Clemente, eighty miles to the south, to San Miguel, one hundred and thirty miles to the west. The inshore waters are shallow, reaching the one hundred fathom line ten miles directly seaward to the southwest, a depth of three hundred and fifty fathoms about five miles beyond. At sixty miles from Venice, somewhat to the west of Santa Barbara Island, lies an oval basin twenty miles long and ten miles in width, having a depth of eight hundred and thirty fathoms. The **Anton Dohrn**, a launch of thirty-five feet over all and of ten feet beam, has been built for the exploration of these waters.

**The Chemical Laboratories** occupy the building in the southern portion of the campus. The laboratories for general and qualitative chemistry will accommodate two hundred students; that for quantitative chemistry forty students; that for organic chemistry twenty-five students. The laboratories are thoroughly equipped with modern laboratory tables, water, gas, apparatus and chemicals; they contain a large number of hoods and all of the conveniences of a modern laboratory. The balance room is a separate room, well lighted and equipped with twelve fine analytical balances. The store-room is supplied with a large quantity of apparatus and chemicals of the best make. A special research laboratory accommodating twenty-five students is thoroughly equipped with storage batteries for electro-chemistry, and with combustion and special apparatus for determining molecular weight. Another laboratory is equipped for investigations on oil and gas. The equipment consists of still, hydrometers, viscometers, Atwater's bomb calorimeters for heat determination, Junker's patent gas-calorimeters, Hempel's gas appar-

atus, Elliott's sulphur apparatus, and a thermo-electric pyrometer. There are also two additional research laboratories.

**The Assay and Metallurgical Laboratory** occupies a large room in the Chemistry Building. The equipment consists of rock crushers, ore grinders of several kinds, and amalgamating fans, all driven by electricity. The furnaces are of the latest type, using gas for fuel. The equipment includes apparatus for concentration and amalgamation tests, as well as a complete cyanide and chlorination plant. Special facilities are afforded for the electrolytic reduction processes. The laboratory is modern in every detail.

**The Laboratories for Geology, Mineralogy, and Soils.** The collections of specimens in geology and mineralogy have accumulated during the past years, and have been classified and arranged so as to illustrate the daily work of the classes in these subjects. Among the collections are those donated by the Rev. C. R. Pattee, Mrs. Mary Wright, and Professor Dickinson, and the one purchased from Dr. Stephen Bowers. A collection of one hundred type soils of the state gives opportunity for comparison and study. Laboratory work is carried on in making relief maps to scale to illustrate the geology, physiography, soils, and mineral industries. A laboratory is being equipped for the physical analysis and identification of soils. The Library contains a large and valuable collection of reference works on the geology, mineralogy, physiography, soils and climate of California. The collection loaned by Professor Bailey includes a complete set of the U. S. geologic folios and soil maps of the State; bulletins on the geology, oil, and mining industries; and many maps, charts, photographs, and lantern slides.

## ATHLETICS AND PHYSICAL TRAINING

The Faculty of the College of Liberal Arts, recognizing that physical training is both hygienic and educative, desires to encourage every reasonable effort in the direction of physical development consistent with well-rounded manhood and womanhood. On its hygienic side physical training should

aid the body in all its functions, develop a symmetrical form, correct deformity as far as possible, and afford recreation. In its educative function it should afford the discipline necessary for self-control, both mental and moral. Athletic sports are encouraged for their value in developing the body, and in furnishing a means of pleasant recreation as well as a source of social and ethical culture.

**Gymnasium and Athletic Grounds.** The gymnasium, the four tennis courts, the basketball court, the inclosed athletic field, with its quarter-mile cinder path, and the bleachers with thirty-five hundred sittings, furnish ample facilities for physical training and outdoor sports. In addition to this the University has free use of the limitless facilities provided by the immense athletic field of Exposition Park, situated just three blocks south of the University.

The gymnasium has been fitted with appliances for the proper development of the body. The necessary apparatus of the newest and most approved designs has been provided. The students have all the advantages of the gymnasium, with baths, lockers, and dressing room accommodations. Men and women occupy the building at different periods of the day, and have baths, locker rooms, and dressing rooms in separate wings of the gymnasium building.

A complete equipment is provided for each form of exercise. Galleries will afford audience room for special gymnastic exercises when such are open to the public.

Each student, on entering the department, undergoes a thorough physical examination, in order that his or her physical condition may be known, and suitable exercise prescribed. Various strength tests and measurements are given; the heart, lungs, sight, and hearing are examined; and the utmost caution is used in the advice given regarding individual exercise. One examination during each semester is required, the latter demonstrating any improvement or change in the student's physical condition. Anthropometric cards and charts are platted for students when desired.

All athletic and team contests are under the close supervision of the director, and no student is permitted to compete in games or contests whose physical examination shows that he or she is unfit.

Any person who desires to enter athletic contests must attain a certain standard of scholarship before being permitted to participate.

## DEBATING

The University provides opportunity for all who wish to engage in debating. During the last season—1914-1915—the schedule of intercollegiate debates included Idaho University, Pomona College, Occidental College, Whittier College, Brigham Young University, Oklahoma University, the University of North Dakota, and Los Angeles Junior College. The schedule for this season includes Stanford University, Texas University, Arizona University, Montana University, Pomona College, Occidental College and Denver University. The present season will give opportunity for the training of thirty men in actual contests. In addition the Freshman teams meet Pomona College Freshmen, Redlands University and Whittier College for development of Varsity material. There is also a Woman's Debate with Occidental College. An equally extensive schedule is being arranged for 1916-1917.

Extensive try-outs are conducted early each academic year, and prizes totaling \$60.00 are offered under the auspices of Delta Sigma Rho Fraternity, to the contestants ranking highest in "sincere and effective speaking." These men, together with others properly qualifying, represent the University in regular intercollegiate debate. (See under "Prizes.")

## RELIGIOUS PRIVILEGES

The moral atmosphere surrounding the student is exceptionally good. The Young Men's Christian Association and the Young Women's Christian Association are active and effective in social and religious life. The Y. W. C. A. meets



every Tuesday at 9:50 a. m. in East Hall. The Y. M. C. A. meets every Tuesday at 9:50 a. m. in the Chapel. Assemblies are held at 11:40 on Monday, Wednesday and Friday. Attendance is required of all students in the College. In addition to the chapel services, courses of special addresses are delivered from time to time. A student prayer-meeting is held every Thursday at 7 p. m. These privileges constitute a good Christian atmosphere in which to lay the foundation of character. Students are expected to attend some church each Sabbath, and are advised to join some Sunday class for the study of the Bible.

The University Methodist Episcopal Church is located near the campus, and is one of the most prosperous churches in the city. The Baptists and Presbyterians, and other denominations, also have churches in the near vicinity. These advantages, together with fine public school privileges, make the University section of the city a very desirable place for the residence of families seeking educational opportunities.

## HOUSING

Requirements as to the housing of students living away from home are in the hands of a special Faculty Committee. These must be complied with before the student may be considered settled.

## THE WOMEN'S HALLS

Under the management of the Women's Club, dormitories are provided for young women, where every home comfort and protection is assured to those coming from a distance.

Women students who are not to live at home (that is, with parents or legal guardians) are required to live in one of the women's halls. Where exceptions are necessary, either from lack of room in the dormitories or other reasons, written approval of other lodgings must be secured from parents or guardian, and filed with the University.

Room and board (except luncheon Monday to Friday) in the Women's Halls, cost one hundred and ten dollars (\$110.00) per semester, payable in advance. A cash deposit of ten dollars (\$10.00) is required for the reservation of a room. Students are expected to supply their own bed linen.

A student vacating a room before the close of the semester will be charged for room and board until the end of the semester, or until the vacancy has been filled by an incoming student. Therefore, for the benefit of the outgoing student, notice of an intention to withdraw should be given at the earliest possible moment.

No lunch is served at the Women's Hall on school days. All students may secure luncheon at the University Cafeteria on the campus, the expense of which is not included in the above-mentioned fee.

Further inquiries and all applications for rooms should be addressed to Mrs. H. Trowbridge, 1110 West Washington Street, Los Angeles.

### THE WOMEN'S CLUB

A society of ladies interested in the welfare of the students was organized ten years ago under the name of Women's Auxiliary to supplement in all practical ways the plans of the University authorities for the comfort and convenience of the student body. The reception room and the girls' rest room were furnished by their efforts; the women's dormitories are under their supervision; and the University Cafeteria for students and Faculty, under their judicious management, is a great success.

There are about one hundred members, and a meeting is held on the last Tuesday afternoon of each month. Mothers of students and ladies interested in the University are cordially invited to become members of this growing organization. Last year the Women's Auxiliary was reorganized as the Women's Club of the University and joined both the State and National Federations of Women's Clubs. In De-

cember, 1914, an Alumnae Department was formed, for the purpose of keeping the interest of the women graduates in the affairs of the University; of supplying a bond of unity for the women now taking graduate work, and of furthering in all possible ways the interests of the University. Only those women who have graduated are eligible to full membership, but any woman who has taken one year's work at the University may become an associate member.

The officers of the Women's Club make the following statement of their chief purpose:

"The present aim of the Club is the erection of a large hall of residence, in place of the rented buildings now being used. The plan is to build around a garden-court, on which all rooms and sleeping porches will open. In this project the Club seeks to enlist the co-operation of every one interested in higher education in the South, irrespective of denominational affiliation."

### **STUDENT ORGANIZATIONS AND PUBLICATIONS**

There are four literary societies connected with the College of Liberal Arts, the Aristotelian and Comitia for men, and the Athena and Clonian for women. Of these, the Aristotelian and the Athena societies, which date back to the early years of the University, have large and well-furnished halls in which to hold their meetings. All of the societies are in flourishing condition. Once a week each conducts programs consisting of debates, papers, readings, music, discussions on current topics of vital interest, and drill in parliamentary law. Periodically all the societies meet in joint assembly under the auspices of the Civic League for the discussion of problems of civic interest and for the furthering of civic righteousness.

Among the students in the College of Liberal Arts are one national fraternity, two national sororities, six local fraternities, and four local sororities. The aggregate membership is over two hundred. One of the noteworthy features of these societies is their spirit of good-fellowship with those

members of the student body who have no such affiliations. The Greek letter societies are under the supervision of a special Faculty committee. A system of grading by the University authorities encourages them to attain a high standard of scholarship.

"The Trojan" is a newspaper managed by a well-organized staff of undergraduates with the co-operation of the Faculty, and devoted to news articles and announcements of events of interest to the University, and to editorial discussion of moment to the student body. The editor-in-chief for the year 1915-1916 is Clifford Burr.

"El Rodeo" is the title of the college annual of descriptive articles, photographs, and cartoons, including all phases of the life in the College of Liberal Arts, and produced by the Junior class of each year.

### FEES AND EXPENSES

Tuition, a semester, payable in advance.....\$46.00

(Special rates will be made to students registering for less than ten hours. **Five dollars** of the above is **registration fee** and is not refundable.)

Diploma Fee, payable 30 days before graduation..... 5.00

Laboratory Fees, per semester:

Assaying.....(to be arranged with Treasurer)

Biology, each course requiring laboratory work..... 4.00

Chemistry ..... 8.00

Electrical Engineering, two- and seven-dynamo laboratories, each ..... 8.00

Philosophy:

Course 8, Psychology Laboratory..... 2.00

Physics:

Courses 1 and 2, each..... 4.00

Course 3, mechanics .....4.00 to 6.00

Course 4, shop..... 6.00

Course 6, electrical measurements..... 6.00

Surveying, field work.....one unit, \$2.50; two units 4.00

Students in Chemistry deposit a breakage fee of \$7.00, which, after deducting the cost of goods broken, will be refunded at the close of the year.

Room and board (except luncheon Monday to Friday) in the Women's Halls, one hundred and ten dollars (\$110.00) per semester, payable in advance. A cash deposit of \$10.00 required for the reservation of a room (not refundable).

Ministers in the regular work of any evangelical denomination may have tuition for their children at half rates.

A discount of ten per cent of the tuition is allowed where two or more students enter from the same family.

A portion of the tuition may be refunded in case a student is compelled to cancel his registration on account of sickness. No refund will be made for an absence of less than half a semester.

Charges for **Graduate work** are made according to the above schedule, except that students who have received their Bachelor's degree from the University of Southern California are granted twenty-five per cent discount.

Ten per cent discount on Tuition of all public school teachers—in active work—who are taking more than two hours in the University.

### **Living Expenses**

The Hodge Hall Boarding Club furnishes board for young men at very reasonable rates. Information concerning membership in this club can be obtained upon application.

Board and furnished rooms can be secured in private families at from five to seven dollars per week. Furnished rooms, accommodating two students, cost from eight to twelve dollars per month.

Other expenses incident to college life vary with the habits and circumstances of the student. They are not of necessity so great as to be burdensome to persons in moderate circumstances.



The Young Men's Christian Association conducts a free rental bureau for the benefit of all students and has all available rooms in the vicinity of the University campus listed and on file. The Young Men's Christian Association and the Young Women's Christian Association also conduct an employment bureau for the purpose of aiding needy and worthy students who are desirous of earning a part of their expenses while in college. The presidents of these Associations will be glad to answer any requests for information addressed to them.

A number of students each year find it possible to earn enough while attending the University to pay their expenses for the year. However, the University recommends that a student provide himself with resources sufficient for the expenses of one semester before registering for full work.

## SCHOLARSHIPS

The following scholarships have been founded in the College of Liberal Arts. Others contemplate the establishment of prizes and scholarships, and it is earnestly hoped that soon a considerably larger number can be offered. Friends of the University can greatly add to its attractiveness in this way.

**The Hugh Johnston Scholarship** was founded by Mrs. Anna H. Johnston, of Pasadena, in memory of her deceased husband, and is for the benefit of needy students. Mrs. Johnston will name the incumbent when she desires; otherwise this will be done by the authorities of the University.

**The Spence Scholarship** was founded by the Hon. E. F. Spence in his life time, and is devoted to the use of needy students in the San Diego district, upon the recommendation of the District Superintendent of that district.

**The A. C. Hazzard Scholarship** is a thirty-year scholarship founded by Rev. A. C. Hazzard, of Whittier, for the benefit of students preparing for Christian work.

**The A. M. Peck Scholarship** was founded by A. M. Peck, of Compton.

**The Poplin Scholarship** was founded by F. L. Poplin, of Los Angeles. The incumbent is to be named by the founder.

**The Ontario Scholarship** is for the benefit of the Ontario High School.

**The Zana E. Stevens Scholarship** was founded by the Rev. F. G. H. Stevens, September 16th, 1907, in memory of Zana E. Stevens, nee Terpenning, of the class of 1901. This scholarship is to be filled by a member of the J. O. C. class of the First Methodist Episcopal Church of Santa Monica, of which Mrs. Stevens was the organizer and teacher. The incumbent is to be named by the founder when he so desires, otherwise by the District Superintendent of the Los Angeles district and the authorities of the University. In case no member of this J. O. C. class is eligible, the incumbent shall be chosen from any J. O. C. members who apply for same. In case none such apply, the incumbent shall be chosen from any female students who apply.

**The A. M. Hough Scholarship** was founded by Mrs. Anna G. Hough, May 7th, 1908, by the payment of one thousand dollars. This scholarship is to be perpetual, and is to be used to aid some student each year in the College of Liberal Arts who is preparing to enter the ministry of the Methodist Episcopal Church. In case no such student should apply, the President of the University is authorized to use the scholarship to benefit any worthy student needing such help.

**The George I. Cochran Scholarship** was founded by George I. Cochran, who names the student receiving the benefit.

**The Abbie Mills Scholarship** was founded by Miss Abbie Mills by the payment of \$1000. The scholarship is perpetual, the President to name the student receiving the benefit.

**The Marion McKinley Bovard Scholarship** was founded by Mrs. Anna Gould Hough as a memorial to the first President of the University. The sum of one thousand dollars

paid makes the scholarship perpetual. The beneficiary must be selected from eligible relatives of the first President if any such candidates apply; otherwise the President of the University may award the scholarship to any worthy student.

**The Helen Miller Gould Scholarship** was founded by Miss Helen Miller Gould by the payment of one thousand dollars. Children of missionaries are eligible for the use of this scholarship.

**The Isaac Sunderland Scholarship** was founded by Mrs. Kate Sunderland, September, 1912, by the payment of one thousand dollars. Mrs. Sunderland, or some person designated by her, selects the student to receive the benefit of the scholarship.

**The Fred W. Kelly Olympic Scholarship** was founded by the friends of Mr. Kelly under the leadership of "The Los Angeles Times" in recognition of the athletic victory won by Mr. Kelly at Stockholm, Sweden, July, 1912. He represented the University of Southern California at the International Olympic contests and won the first place in the one hundred and ten meter high-hurdle race, time, 15.1 seconds. The scholarship is perpetual.

**The Rhodes Scholarship.** Attention is called to the opportunities presented by the scholarships founded by the late Cecil Rhodes, of South Africa. Each of these is worth \$1500 per year for three years, the term to be spent at Oxford University. To be eligible to appointment candidates must pass a qualifying examination. Full particulars will be given on application to the Rhodes Scholarship Committee of the Faculty of Liberal Arts.

## PRIZES

**The Lottie Lane Prize**, established by Mrs. Charlotte A. Thompson as a memorial to a deceased daughter, is an elaborate gold medal to be presented each year at Commencement to that member of the graduating class who shall have

maintained the highest general average in scholarship throughout the whole college course. Students who have taken more than four academic years to complete the course, and those who have received credit for work done elsewhere than in this College, are not eligible for this prize. This medal was awarded in 1915 to Lucy Burwell Adams.

**The University Oratorical Prize** of a one-semester scholarship in the junior or senior year of the College of Liberal Arts (value, forty dollars) is offered to that student who represents the University in the annual Intercollegiate Oratorical Contest; and an additional one-semester scholarship in the junior or senior year is awarded if the said representative wins first place in the Intercollegiate Contest. The scholarship is not transferable.

**The Intercollegiate Prohibition Oratorical Contest Prize** of one semester in the junior or senior year of the College of Liberal Arts (value, forty-six dollars) is offered to that student who represents the University in the annual Intercollegiate Prohibition Oratorical Contest; and an additional one-semester scholarship in the junior or senior year is awarded if the said representative wins first place in the Intercollegiate Prohibition Contest. The scholarship is not transferable.

**Debating Prizes.** Prizes amounting to a total of \$90.00 are offered to the eight contestants ranking highest in the annual series of debating try-outs, as follows: First prize, gold medal and \$15.00; second, silver medal and \$10.00; third, \$15.00; fourth, \$10.00; fifth, \$10.00; sixth, \$5.00; seventh, \$5.00; eighth, \$5.00.

## GIFTS TO THE UNIVERSITY

**The Hough Fund.** This is a fund of \$85,000 given by Rev. Asahel M. Hough, deceased, and his wife, Anna G. Hough, of Los Angeles. It is to be held by the University in perpetuity, and the income is to be used for current expenses of the College of Liberal Arts, or as the Board of Trustees may annually direct.

**The Hazzard Professorship.** Rev. A. C. Hazzard has given to the University property valued at \$30,000 for the endowment of a professorship in the English Bible.

**The Merryman Professorship.** Mr. T. D. Merryman has given to the University property valued at \$25,000 for the endowment of a professorship in Mathematics.

**The Hartupee Gift.** This gift consists of \$22,500.

**The Carnegie Gift.** This gift consists of \$25,000.

For further information address

UNIVERSITY OF SOUTHERN CALIFORNIA,  
Los Angeles, California.



# SUMMER SESSION

## Announcement

The annual Summer Session of the College of Liberal Arts of the University of Southern California will be held at the College of Liberal Arts on University Avenue, and at the Venice Marine Station, beginning Monday, June 26, and closing August 4, 1916.

Thursday, Friday and Saturday, June 22, 23 and 24, will be regular registration days at the Registrar's office, and when practicable, students are asked to register on these days.

## Visiting Professors

Ernest Carroll Moore, Professor of Education, Harvard University, is well known to California teachers, having served for many years as Professor in the University of California, and for four years as Superintendent of Public Schools in Los Angeles. In the year 1910 he was called to the chair of Education in Yale University, and in 1913 received a similar appointment at Harvard University. For three years he was Dean of the Summer Session at Berkeley (1905-07).

Dr. Moore will conduct two classes, one on "Methods of Study and Teaching Others How to Study," another on "School Administration with Special Reference to Cities."

Further announcement of visiting professors, with description of their courses and other courses, will be made in the near future in the regular Summer Session Bulletin.

## Purpose of the Summer School

Courses offered in the Summer Session are designed to meet the needs of the following classes:

1. Undergraduates and graduates of schools and colleges.
2. Teachers, including those in grade schools, high schools, and other institutions of learning.
3. Persons desiring (as auditors) to attend courses without doing full or regular work, or taking examinations. Those enrolled as auditors do not receive University credits.

**Admission Requirements**

The admission requirements to the Summer Session are, for all except those enrolled as auditors, uniform with the admission requirements to the regular sessions of the College of Liberal Arts.

**Credits**

Six units of College credit represent full work for the Summer Session. In case an undergraduate student carries successfully more than a full course, before additional credit may be obtained application must be made to the Registrar, and such application must be favorably acted upon by the Scholarship Committee. By a recent ruling of the Graduate Council six units is, as a rule, the maximum credit for a graduate student in a single Summer Session.

All classes recite five times a week unless otherwise indicated. Five recitations or ten laboratory hours per week for the six weeks entitle the student to two units of credit.

**FEES AND EXPENSES**

The payment of the Registration Fee entitles a student to enroll in as many of the courses as he is qualified to carry.

Registration fee .....\$20.00

**Laboratory fees—**

Chemistry ..... 5.00

(A breakage deposit of \$3.00 is also required. This is returned, less breakage.)

Botany ..... 3.00

Zoology ..... 3.00

DEPARTMENTS OF INSTRUCTION  
SUMMER SESSION, 1915

BIOLOGY

Botany

ANDREW C. LIFE, Associate Professor

- General Botany. Four or six units.  
Field Botany and Taxonomy. Two units.  
Plant Physiology. Two or three units.  
Marine Algae. Two or three units.

At the Venice Marine Station

ALBERT B. ULREY, Professor  
SAMUEL RITTENHOUSE, Associate Professor

Zoology

- General Zoology. Six to eight units.  
Comparative Anatomy of Vertebrates. Four units.  
Special Zoology. Two to four units.

General Biology

- The Biological Survey. Two to four units.  
Research. Two to six units.  
General Lectures.

CHEMISTRY

LAIRD J. STABLER, L. S. WEATHERBY, Professors

- General Inorganic Chemistry. To be accompanied by course 1a. Three units.  
General Inorganic Chemistry. Two units.  
Elementary Organic, Food, and Textile Chemistry. To be accompanied by course 1s.a. Three units.  
Elementary Organic, Food and Textile Chemistry. Two units.

- Qualitative Analysis. Metals. Two units.  
Qualitative Analysis. Non-metals. Two units.  
Quantitative Analysis. Two units.  
Physical Chemistry. Two units.  
Agricultural Analysis. Three units.

### ECONOMICS

ROCKWELL D. HUNT, CLOYD H. MARVIN, Instructors

- Socialism and Social Reform. Two units.  
Pacific Slope History. Two units.

### EDUCATION

THOMAS B. STOWELL, ERNEST C. MOORE, Professors

- Principles of Education. Three units.  
Philosophy of Education. Three units.  
Methods of Study and Teaching Others How to Study.  
Two units.  
School Administration. Two units.

### ENGLISH LANGUAGE AND LITERATURE

ALLISON GAW, PAUL SPENCER WOOD, JAMES MAIN DIXON,  
Professors

BENJAMIN F. STELTER, Associate Professor

- The Laws of Editing. One Unit.  
Burns and Scottish Vernacular Poetry.  
Survey of English Literature. First semester.  
English Poetry Between 1798 and 1832.  
Milton and His Period.  
Introduction to American Literature.  
The English Essay.

### FRENCH

LAWRENCE M. RIDDLE, Professor

- Elementary French. Five units.  
Phonetics and Reading of Short French Texts. Five units.  
Advanced French. Two units.  
Phonetics and French Pronunciation. Two units.

## GERMAN

MARGARET G. BORTHWICK, Professor  
BERTHA JACOBY-KIENLE, Associate Professor

Beginning German. Three units.  
German Conversation. Two units.  
Upper German. Three units.  
Advanced German. Three units.  
Teacher's Course. Two units.

## HISTORY

TULLY KNOLES, ROY MALCOM, FRANK J. KLINGBERG,  
ROCKWELL D. HUNT, JAMES MAIN DIXON, Professors

History of the Middle Ages.  
Europe Since the Congress of Vienna.  
History of the United States.  
Pacific Slope History.  
Teachers' Course in History.  
Japanese History and Civilization.

## MATHEMATICS

PAUL ARNOLD, Professor  
HUGH WILLETT, Associate Professor

Theory of Algebra. Two or three units.  
Solid and Spherical Geometry. Three units.  
Trigonometry. Three units.  
Plane Analytic Geometry. Three units.  
Differential Calculus. Three units.  
Integral Calculus. Three units.  
Teachers' Course. Two units.

## ORATORY

BEULAH WRIGHT, Dean

Voice Building.  
Interpretations.  
Extemporaneous Speaking.  
Declamation and Extempore.



A Study of Lyric Poems.

Story-Telling.

Practical Instruction in Staging Plays.

## PHYSICS

ARTHUR W. NYE, Professor

General Physics, Mechanics, and Heat. Three units.

General Physics, Electricity, and Light. Three units.

Physical Measurements. One unit.

General Physics, Heat.

General Physics. One or two units.

Physical Measurements. One or two units.

Electrical Measurements. Two units.

Advanced Laboratory.

## PHILOSOPHY

FESTUS E. OWEN, Professor

The Psychology of Thinking.

Elementary Logic.

Ethics. Two units.

## PHYSICAL EDUCATION

WM. RALPH LAPORTE Physical Director for Men

EDNA A. COCKS, Physical Director for Women

General Gymnastics. One unit.

Outdoor Sports. One unit.

Hygiene and First Aid to Injured. Two units.

Methods of Playground and Gymnasium.

Playground Administration.

Anthropometry and First Aid to the Injured.

## POLITICAL SCIENCE

ROY MALCOM, JAMES M. DIXON, Professors

International Law. Two units.

Political Development of Japan. Two units.

American Government. Two units.

**ORIENTAL DEPARTMENT**

JAMES M. DIXON, Professor

**The Political Development of Japan.** Two units.

**Kipling's India.** Two units (Dixon).

**SOCIOLOGY**

EMORY S. BOGARDUS, ROCKWELL D. HUNT, Professors  
HARRY, J. McCLEAN, Lecturer

**Municipal Problems.** Two units.

**Social Legislation.** Two units.

**Social Psychology.** Two units.

**SPANISH**

JULIO ZIEGNER-URIBURN, Lecturer  
ESPERANZA CARILLO, Instructor

**Elements of Spanish.** Four units.

**Advanced Elementary Spanish.** Two units.

**Contemporary Spanish Drama.** Two units.

**Latin-American Literature.** One unit.

# THE COLLEGE OF PHYSICIANS AND SURGEONS

## FOREWORD

The University of Southern California, in establishing and building up the various professional colleges, was one of the first institutions in the West to broaden the scope of the curriculum in its medical department. In 1885, when the medical department of this University was founded, the Trustees placed themselves on record for higher medical education, declaring for a three-year course, which was the exception at that time, and since then this institution has constantly striven to place its medical department upon a high plane of efficiency, raising its entrance requirements to one year of college work, in addition to the high school course, beginning with session of 1914-15, and to two years of college work beginning with session of 1916-17. The Alumni of the Medical Department of this University include many of the leading physicians and surgeons of this country.

The College of Physicians and Surgeons of Los Angeles, became an integral part of the University of Southern California August 11, 1909.

The government of the College of Physicians and Surgeons is vested in the Board of Trustees of the University, as provided in the articles of incorporation.

## Environment

The advantages derived by the students of the University of Southern California from the fact that it is situated in Los Angeles, the metropolis of Southern California, have already been noted.

The population of Los Angeles is essentially cosmopolitan. People in the different walks of life, from all quarters of the globe, are to be found here, and there is therefore an abundance of clinical material, which this college utilizes to the very best advantage.

**FACILITIES FOR INSTRUCTION****The College Building**

Located at 516 East Washington Street, in a charming section of Los Angeles, surrounded by splendid homes and easy of access, not on the outskirts of the city nor yet too near the business center, is to be found the modern and commodious building of the College of Physicians and Surgeons. It was designed and erected especially for our use, and contains all of the elements of a modern and thoroughly up-to-date college hall. It is a three-story structure with basement, is built of brick with stone facings, and is practically fireproof.

In the basement are located the instantaneous water-heating system; a furnace that conveys heated air to each department, with apparatus for forcing cool and pure air into each room when needed; storage tanks for anatomical material; a receiving and preparation room for the same; and a shower bath for the use of students.

On the first floor are located the college offices, the library and reading room; a chemical laboratory; a laboratory for physiology and pharmacodynamics, thoroughly equipped with all modern apparatus and appliances; clinical rooms for each department of medicine and surgery, and specialties; the operating room, sterilizing room, clinic waiting room, and drug room; and a completely equipped clinical laboratory for the use of the clinic department.

Located on the second floor are the Pathological, Bacteriological, Histological, and Embryological laboratories, which have east, north and west exposures, affording an abundance of light, and are well heated and equipped with all modern appliances. Glass-covered tables are arranged around the north and west exposures, and all the latest apparatus has been installed. Each student is supplied with a microscope (Bausch and Lomb), with oil-immersion lens, for use when required. Private laboratories form a part of the main laboratory hall, thus affording opportunity for special private research. On the second floor are also located

one large amphitheatre, seated with two hundred modern opera chairs; also equipped with one of the latest projectoscopes; one lecture hall, seated with opera chairs; an electrotherapeutic room, equipped with coils, X-ray apparatus, and all necessary appliances; and a chart room, supplied with imported charts, manikins, etc., arranged for use in various illustrative and didactic work. There are to be found upon the shelves of the College Museum many rare and valuable pathological specimens. A room on the second floor has been set apart and furnished for the exclusive use of women students.

On the third floor is located the Anatomical Department, complete in every detail. Opening into the main Anatomical Department, by sliding doors, is the Anatomical Amphitheatre, seated with opera chairs and equipped with a revolving table, so arranged that the most delicate operations and demonstrations upon the cadaver can be witnessed.

Much new apparatus is constantly being added in all departments, stereopticon illustration being one of the leading features in our primary departments. No expense has been spared to equip this college adequately for the teaching of medicine and surgery and for the comfort and the health of teachers and students.

### **Laboratory Equipment**

**Division I. Anatomy, Histology, and Embryology. (a.)**  
**The Anatomical Laboratory** is admirably adapted to the purpose of teaching practical anatomy. The room is on the top floor of the college building and is well lighted, well ventilated, and kept in a thoroughly sanitary condition. It is provided with every facility for giving students a detailed knowledge of anatomical structures. The dissecting room is supplied with excellent light through extensive sky-lights, supplemented by an excellent electric equipment. In addition to abundant material for dissection, the Anatomical Laboratory contains a large and very valuable collection of dissected parts, which have been especially prepared for their teaching value and not as a mere collection of rare specimens.



The lecture and demonstration amphitheatre is adjoining the dissecting laboratory, with folding doors leading into the lecture hall, thus offering additional facilities for presenting the dissected specimens to the classes during lecture and demonstration. On the same floor is situated a thoroughly equipped bone-library, which consists of articulated and numerous disarticulated human bones, perfectly bleached. From this bone-library, lateral halves of the human skeleton are loaned to the student, free of charge, for study at home.

Across the hall from the bone-library, special private laboratories are provided for the professor and assistants, for research work in General Anatomy, including Histology, Embryology, and Neural Anatomy.

The laboratory is equipped with the most modern scientific appliances, such as dissecting microscopes, a compound microscope of the best foreign make, a precision microtome, a rotary microtome for serial sections, and a number of other indispensable instruments. In connection with this laboratory a Chart and Model Room is maintained. This contains many imported papier maché models of organs of the special senses, particularly the brain and the spinal cord, and also about one hundred brush and paint anatomical charts (20x45 inches) made from actual dissections and painted by one of the best anatomical artists of the East.

(b.) In addition to the complete and thoroughly equipped Anatomical Department, **The Histological and Embryological Departments**, which are a part of the Anatomical Sections, are thoroughly equipped with all modern and up-to-date apparatus necessary for the teaching and conducting of these most important correlative branches. This department is abundantly supplied with high-grade microscopes, with Abbe condenser, diaphragm attachments and oil-immersion lens, paraffin baths, the latest modern microtomes for celloidin and paraffin sections, projectoscopes, injection apparatus, charts, drawings, and a vast collection of slides of tissue and organs, together with all necessary apparatus for bringing these two important departments up to the very highest state of efficiency.

**Division II. Physiology, Pharmacodynamics, and Dietetics.**

These departments are especially well equipped. In the **Physiological Department** there is provided apparatus for blood work, spectroscopes, compound microscopes, kymographs, sphymographs, respirometers, chronograph and stimulating apparatus, coils, batteries, cylinders and rheocords, moist chambers and all accessories for nerve work; heart levers, manometers, tonometers, etc., with accessories and all necessary apparatus for the study of capillary circulation; polariscopes, galvanometers, and mercury cups for gas analytical work, thermostats and incubators, perimeters, ophthalmometers and ophthalmoscope lenses; Galton whistles, etc.

**Division III. Chemistry, Toxicology, and Hygiene.**

The Chemical Laboratories are similarly well equipped with fume chambers, drying ovens, spectroscopes, Kjeldahl nitrogen apparatus, apparatus for milk analysis, and all other apparatus necessary for a complete Chemical Laboratory. The Chemical Laboratory contains individual lockers equipped with all apparatus necessary to perform the experiments outlined in the syllabus, ventilating hoods, drying ovens, Kjeldahl stands, quantitative balances, freezing point apparatus, etc. These are so arranged that while the students work in sections, each performs individually every experiment.

**Division IV. Pathology, Bacteriology, and Clinical Microscopy.** (a.) The **Pathological Laboratory** is furnished with paraffin bath and the necessary accessories for the proper embedding of tissues, a microtome for cutting celloidin sections and one for cutting paraffin sections, a freezing microtome, a projectoscope and charts, and a collection of microscopical specimens of all the ordinary pathological lesions and many of the rare conditions, which are given to the student for study. Each student is supplied with a microscope furnished with the necessary objectives, oculars, Abbe condenser, diaphragm, etc.

In addition to this, each student is supplied with a complete set of mounting and staining materials suitable for doing first-class work in the preparation of his own specimens. Each

student is required to supply himself with a suitable drawing outfit with which to draw the essential features of the various lesions as represented by the slides which are furnished by the Department.

The **Museum**, which is located on the second floor of the college building, is equipped with a large supply of specimen jars. The gross specimens, which include most of the pathological tissues, number between one and two thousand, and additions to the collection are constantly being made. These specimens are catalogued by a card-index system, which enables the Department to keep data concerning each specimen. The specimens are given to the students repeatedly during the course of the year to familiarize them with the naked-eye appearance of gross pathological lesions.

(b.) In the **Bacteriological Department** the equipment is ample to permit students to work in pairs, independent of the remainder of the class, in the preparation of culture media, staining fluids, etc., while for the sterilization of glassware and of the finished media, one hot-air oven is supplied to each group of five students, and one autoclave and one Koch's serum oven for each group of twenty-five students.

Each group of two students is supplied with boilers, burettes for accurate trituration and adjustment of the reaction of the media, glass funnels with filter paper and cheese-cloth, test paper, cork borers, scales, and materials for making the ordinary culture media, as bouillon, gelatin, agar, milk, potatoes, and blood serum.

Each student is individually supplied with an ample number of culture tubes, Petri dishes, flasks, cleaning brushes, fermentation tubes, platinum wires, plain and hollow ground slides, staining fluids, and mounting materials.

The department has an ice chest for preserving media and certain culture, an incubator, an electric centrifuge, Novi jars for anerobic bacteria, animal holders to facilitate inoculation, etc.

In the preparation of culture media the students work in the laboratory on the first floor, where at present our facilities

in the way of gas, water, and desk room are greater than in the laboratory on the second floor. The latter laboratory is well lighted and has ample desk room and seating capacity. Each student is provided with a microscope for use in such class-work as the inoculation of media and the study of biological characteristics and microscopical appearances. This room is also supplied with an incubator in which the student may follow the development of the cultures, and with lockers, in which the student keeps such cultures as do not require the incubator.

### **The Teaching Staff**

The Faculty and the general teaching staff of the College of Physicians and Surgeons have been selected with scrupulous care, and comprise many of the ablest teachers and leading men and women in the West. Laboratory facilities and equipment alone are not sufficient for a thorough course. Laboratories must be manned by competent and experienced teachers and instructors, and in this College the laboratories are in charge of full paid teachers, noted for their abilities as teachers in their respective departments.

### **CLINICAL FACILITIES**

**The County Hospital Clinic.** The Los Angeles County Hospital is the most extensive, modern, and up-to-date county charity institution in the West, with about 1250 beds, and with detention wards for the insane, and modern medical, surgical, and contagious wards and departments, where all manner of surgical and medical cases may be studied. It offers rare and ample opportunities for the observation, not only of the ordinary diseases and conditions usually met with in other large hospitals, but also of rare tropical and semi-tropical diseases that drift into Los Angeles from Panama, Hawaii and the Philipppnes, etc. These afford unusual opportunities for research work. The Senior and Junior classes are divided into sections of two or three students each, and these sections are allotted cases each week and are required to examine and diagnose by the latest and best known labor-

atory and clinical tests, write histories covering the etiological factors of each disease, and to outline the treatment and management of given cases throughout the different stages, following the case to convalescence or to autopsy. In the latter event pathological findings are reported upon by the section in charge of the case, the efficiency, or otherwise, of the treatment being thus noted.

The opportunities for the study and observation of acute Surgery are abundant, many cases being sent in from the City Hospital after first aid is given, and hundreds of cases being taken direct to the hospital for first aid and subsequent treatment. The Ambulatory Surgical clinic is unexcelled, and the Detention Wards afford a rich field for the study of the various forms of neurotic cases and conditions. Students in this College are required to serve their time in each and all of the various departments of this hospital, which offer so rich a field for clinical experience.

**The Washington Street Clinic. (College Dispensary.)** From 1 to 3 p. m. each day, excepting Sundays and holidays, the College Dispensary is open to the needy poor. The Dispensary Staff of the college, composed of over thirty carefully selected men and women, give their best services to those applying for treatment, and, as the College of Physicians and Surgeons is located in a decidedly well-to-do neighborhood, the clinics in this institution are of an unusually high order, capable of giving a complete case history and enabling the teacher and student to study each case in detail and note the effect of therapeutic measures. Material coming to this clinic is ample and of splendid quality. More than fifty patients apply daily for treatment in the various departments of this clinic, and the number is steadily increasing. A registered pharmacist is in charge of the prescription department and students are rotated through this department and have practical experience under the direct instruction of the pharmacist in charge.

**The Out-Patient Clinic.**—The population of the city of Los Angeles has a large foreign and floating element, which contributes largely to our clinics in all departments. The college



clinic draws materially from this available material; and the Out-Patient Clinic, Obstetrical and General, is made abundant by conditions always existing in a city of a half million population. The College Dispensary maintains a well regulated system of assigning students from the upper classes to this out-patient service, of which complete record is kept and control maintained. The obstetrical service is especially abundant, at our Obstetric Clinic at 2150 East Ninth Street.

**The Homer Toberman Clinic.**—This, otherwise known as the Seventh Street Clinic, is located at 2027 East Seventh, corner of Mimosa Street. It was established by the City Mission Board of the Methodist Episcopal Church, South, and turned over to this College. It is open to the needy poor from 1 to 2:30 p. m. each day, excepting Sundays and holidays. It is in the heart of the clinic district of Los Angeles, and a most flourishing and prosperous clinic is being established. Every department of medicine and surgery is represented. Sections from the Junior class are rotated through this dispensary, and this addition to clinical facilities gives more than ample material for teaching purposes.

## LIBRARY FACILITIES

The library occupies a spacious, well-lighted, heated and ventilated room on the first floor, with east and north frontage, furnished with three large library tables around which students gather, and with comfortable arm reading chairs placed around the room. About two thousand medical volumes, including the latest modern text and reference books, are on the library shelves; and over eighty up-to-date medical periodicals come regularly to the library table, which enable the upper class students to keep in touch with current medical topics. The library is under the control of a librarian and the Dewey Library System of receiving, marking, listing and distributing is maintained.

The women students have their separate reading room, finely furnished and equipped.

The College of Physicians and Surgeons being an integral part of the University of Southern California, its students have free access to the University Library, containing over seventeen thousand volumes, covering the entire range of literary and scientific subjects.

The Barlow Medical Library, containing about four thousand volumes, donated to the medical profession of Southern California, is also available to the students of this College.

The Los Angeles County Hospital also has a good medical library, to which our students have access.

## **REQUIREMENTS FOR FRESHMAN MATRICULATION**

In accordance with the general advance in medical and surgical teaching and the necessary pre-medical training, the following requirements for entrance to the Freshman class have been established. Beginning with the 1916-17 session this College matriculates freshman students only on the following standard:

A certificate from the Credential Committee of the University of Southern California, covering Requirements I. and II., as mentioned below: (Applicants for matriculation are requested to present their credentials to the Registrar of the University, Prof. J. H. Montgomery, Thirty-fifth Street and University Avenue, Los Angeles. After securing entrance certificate, applicants are requested to matriculate at the Dean's office, 810 Citizens' National Bank Building, as early as possible. No student will be matriculated after September 15th.)

### **Requirement No. I.**

A diploma and transcript of record from a fully accredited<sup>1</sup> high school, normal school, or academy, requiring for

<sup>1</sup>The term "accredited" as applied to high schools, academies, colleges, and universities means institutions of those types that have been investigated and are accredited by the State University of their respective states, or by the North Central Association of Colleges and Secondary Schools, the Association of Colleges and Preparatory Schools of the Middle States and Maryland, the New England College Entrance Certificate Board, or the Association of American Universities; provided that such accrediting is based on the studies enumerated below.

admission evidence of the completion of a standard course in primary and intermediate grades, and for graduation the completion of a standard high school course embracing the fourteen units mentioned below; or an examination<sup>2</sup> in the following branches, totaling fourteen units,<sup>3</sup> to be made up of **seven required** and **seven elective units** as prescribed in the following table:

	Required Units	Elective Units	Total Units
<b>ENGLISH—</b>			
Reading and Practice.....	2	---	2
Study and Practice.....	---	1	1
<b>MATHEMATICS—</b>			
Algebra to Quadratics.....	1	---	1
Algebra (quadratic equations, the binomial theorem and the pro- gressions) .....	---	$\frac{1}{2}$	$\frac{1}{2}$
Plane Geometry .....	1	---	1
Solid Geometry .....	---	$\frac{1}{2}$	$\frac{1}{2}$
Trigonometry .....	---	$\frac{1}{2}$	$\frac{1}{2}$
<b>LATIN—</b>			
Grammar and Composition.....	---	1	1
Caesar .....	---	1	1
Cicero .....	---	1	1
Virgil .....	---	1	1
Cornelius Nepos .....	---	1	1

<sup>2</sup>This examination must be conducted by and under the authority of the Board of Medical Examiners of the state in which the college is located, or by a duly authorized examiner of the College Entrance Examination Board, or by the authorized examiner of an accredited university, state or otherwise, or by an examiner whose certificates are accepted by accredited colleges or universities, or by a method approved by the Judicial Council of the Association of American Medical Colleges.

<sup>3</sup>A unit is the credit value of at least 36 weeks' work of 4 or 5 recitation periods per week, each recitation period to be of not less than 40 minutes. In other words, a unit represents a year's study in any subject in a secondary school constituting approximately a quarter of a full year's work. A satisfactory year's work in any subject cannot be accomplished under ordinary circumstances in less than 120 sixty-minute hours, or their equivalent.

**Greek—**

Grammar and Composition.....	1	1
Xenophon .....	1	1
Homer .....	1	1

**GERMAN OR FRENCH<sup>4</sup>—**

Elementary .....	2	2
Intermediate .....	1	1

**Spanish—**

Elementary .....	2	2
------------------	---	---

**Scandinavian—**

Elementary .....	2	2
------------------	---	---

**HISTORY—****American History and Civil Gov-**

<b>ernment</b> .....	1	1
Greek and Roman History.....	1	1
Medieval and Modern History.....	1	1
English History .....	1	1

**Science<sup>5</sup>—**

Biology .....	1	1
(Or Botany and Zoology, each).....	1	1
Chemistry .....	1	1
Physics .....	1	1
Physiography .....	½	½
Physiology .....	½	½

<b>Agriculture</b> .....	1	1
--------------------------	---	---

<b>Drawing</b> .....	1	1
----------------------	---	---

<b>Manual Training</b> .....	1	1
------------------------------	---	---

<b>Domestic Science</b> .....	1	1
-------------------------------	---	---

<b>Music (Appreciation or Harmony)</b> .....	1	1
--	---	---

<b>Total</b> .....	7	28½	35½
--------------------	---	-----	-----

<sup>4</sup>Two units of Greek or Latin may be substituted for the two required units of French or German. But this will necessitate extra work in French or German in the college year. See note 7.

<sup>5</sup>It will be greatly to the student's advantage to include Biology, Chemistry, and Physics among his elective units. See note 7. Credentials of each science course must include evidence of laboratory work.

## Requirement No. II.

In addition to the above prescribed college preparatory units, **two full years'** work in the College of Liberal Arts of the University of Southern California, or other approved colleges or universities, including one year's work of college grade<sup>6</sup> in Physics, Chemistry, Biology, and German (or French), as indicated<sup>7</sup> in the following schedule:

	Lectures or Recitations per week	Laboratory <sup>8</sup> Periods per week	Total Hours per Semester	Total Hours per year Semester
Physics <sup>9</sup> .....	2	2	4	8
Chemistry .....	2	2	4	8
Biology .....	2 or 3	2 or 1	4	8
German or French.....	4 or 3		4 or 3	8 or 6
Totals .....	10	6 or 5	16 or 15	32 or 30

The foregoing table may be expressed in class hours as follows:

	Total Hrs. Lectures or Recitations	Total Hours Laboratory Work	Total Minimum Hr. Diadetic and Laboratory
Physics <sup>9</sup> .....	64	128	192
Chemistry .....	64	128	192
Biology .....	64 or 96	128 or 64	192 or 160
German or French.....	128 or 96		128 or 96
Totals .....	320	384 or 320	704 or 640

Additional elective units to complete course of 30 units—

<sup>6</sup>The work of this preliminary college year must extend through one college session of at least thirty-two weeks of actual instruction, including final examinations. In excellence of teaching and in content, the work of this preliminary college year must be equal to the work done in the Freshman year in standard colleges and universities.

<sup>7</sup>The statement of units and of hours of recitations as given in the lists presupposes that in each case one unit of preparatory work in that subject (two units in the case of German and French) has been offered for entrance to the college course in question. If in the case of any subject except Physics (see note 9) this preparatory work has not been done, the deficiency must be made up in full during the course of the college year prior to matriculation in the College of Physicians and Surgeons.

<sup>8</sup>Each laboratory period must extend over at least two hours.

<sup>9</sup>For the one-year Physics requirement, may be substituted one unit of high school Physics and a half-year of college Physics, which continues, and does not duplicate, the work done in high school.



**Advanced Standing**

This College does not grant time-credit to students holding a baccalaureate degree or a degree in Pharmacy or Dentistry, or for time spent in any other than a regular College of Medicine and Surgery, the curriculum and course of which meet the requirements of the Association of American Medical Colleges; but may grant the student subject-credit for work done, satisfactory evidence of which is furnished; where-upon the student may avail himself of equivalent electives.

A student who has previously matriculated with and has spent time in another accredited medical college, recognized as such by this institution, will be required to present to the Dean of this College a statement from the Dean of the college he has attended, stating that he has paid all dues and fees due said college; that he is free from all charges or demerits of whatever nature; and that he has satisfactorily completed the course of study prescribed by the curriculum of said college; and provided that the entrance requirements of the college from which he presents his credentials were equivalent to those of the Association of American Medical Colleges at that time, and that the course of study provided and set forth in each student year was equivalent to the requirements of this school; and provided further that the Judicial Council are satisfied with his credits and markings, taking into consideration his general average, which will include his percentage of attendance upon all lectures, recitations, laboratory work, and clinics, the student may then enter upon his work in the succeeding grade. Before advanced standing will be granted him, however, the Dean of this College will verify the student's credentials. If they are found complete and satisfactory, credit for the work will be entered upon the records of this college; but such advancement will not exempt the student from the final examination requirements exacted of all students applying for a degree from this College.

A student presenting credentials and credits from another medical college, recognized by this College, should bear in mind the fact that such credentials must show that the credits were received in the regular way, and in the regular course

of instruction; and that the said course must have been regular and in accordance with the requirements of the Association of American Medical Colleges, the California State Law, and the Board of Medical Examiners of the State of California. No credit whatever will be allowed for time not actually spent in a regular recognized medical college.

A student who has attended one or more courses in a medical college otherwise reputable, but whose entrance requirements are not now equivalent to those of this institution, notwithstanding he may meet our class examination requirements, will not be granted advanced standing, unless the preliminary qualifications of said student were equivalent to the requirements of this college at the date of matriculation in the college from which he comes.

Graduates of medical colleges whose requirements were equivalent to those prescribed by the Association of American Medical Colleges, and whose credentials are recognized by the Board of Medical Examiners of the State of California, will be admitted to the Senior class without examination; provided, however, that the curriculum of study of the aforesaid college covered three full years, and provided also that the requirements for matriculation were equivalent to the requirements of the Association of American Medical Colleges at the time of his matriculation. Should, however, the college from which the applicant graduated have prescribed and required at the time of his graduation only a two years' course, the applicant will be matriculated in the Junior year and will be required to pursue the course outlined in our Junior year schedule, provided that the matriculant is working for a degree from this school, but not otherwise. Juniors and Seniors of this College are required to attend at least 80 per cent of all clinics throughout the Junior and Senior years.

To graduates and students of Colleges of Homeopathic or Eclectic Medicine will be granted time-credits for as many years as they attended those colleges, provided they have met the previous requirements of the Association of American Medical Colleges, and that they pass an examination in *Materia Medica* and *Therapeutics*, as prescribed by this Col-

lege. All students admitted to advanced standing must show credentials of having passed regular examinations in the branches taken in the year preceding the one they desire to enter, or must pass such examination in this College.

### **REGULATIONS GOVERNING THE COURSE OF STUDY**

The curriculum of study in this College is divided in a manner that enables the student to complete his minors, together with the majority of the laboratory courses, during the Freshman and Sophomore years, thus enabling the Junior and Senior students to avail themselves of the large amount of didactic, recitation, and clinical work that composes the last two years of the course.

Each student is required to attend 80 per cent of all exercises in every annual course of study for which he seeks credit. No student will be given credit on examination unless he shall have attained a grade of at least 75 per cent, or its equivalent in some other marking system, and no student will be graduated unless he shall have attained a passing grade on examination of at least 80 per cent in each and all subjects taught and examined upon in this college.

The carrying and removal of conditions in all cases will be governed by the rules and regulations promulgated from time to time by the Association of American Medical Colleges and in conformity with the State Law of California. When not in conflict with these rules and regulations a student, to advance from one grade to the next higher grade, must pass at least all but two of the required examinations in the branches or subjects taught in that year, except that in passing from the Junior to the Senior year, all of the required examinations must be passed. Should he fail, at the beginning of the succeeding session, to pass the examination in the subjects in which he has been conditioned as stated above, he may enter the higher class as a conditioned student for that one session only, and if he does not remove the said conditions by the end of the session, he must repeat the work of the year in which the said conditions were imposed.

No student can, therefore, become a conditioned or an unconditioned member of the Sophomore class unless he has passed at least all but two of the required Freshman year examinations when that year closes; nor of the Junior class unless he shall have passed the Freshman year examinations, and, in addition, at least all but two of the Sophomore year examinations at the close of that year; nor of the Senior class unless he shall have passed all of the Freshman, Sophomore and Junior year examinations. This College does not permit the carrying of conditions into the Senior year.

This College reserves the right to refuse admission to any student, or to terminate the attendance of any student, at any time, for what may appear to the Judicial Council to be good and sufficient cause, as inefficiency, conduct unbecoming a gentleman, or conduct not conducive to the morale of the class or institution; and also to refuse a student the privilege of any special or final examination, for cause, as above stated.

Students will not be permitted to substitute private work in any branch for the regular college work prescribed in our curriculum, except under the direct supervision of an instructor designated or appointed by the Dean. Examinations in work so done will be conducted by the professor to whose department it belongs. No markings nor credits from private instructors will be recognized.

A student entering this College will be required to conform to all rules and regulations of the College as promulgated from time to time by the Dean.

A student who is under suspension or expulsion from an accredited medical college will not be matriculated in this institution without the written consent of the college imposing such suspension or expulsion.

A student defacing or injuring the property of this College will be required to make due reparation for same.

## REQUIREMENTS FOR GRADUATION

The applicant for the degree of Doctor of Medicine must have fulfilled all the requirements as set forth in this announcement, and all other additional requirements that may



be promulgated from time to time by this College. He must also be eligible for graduation under the following conditions:

1. He must have attained the age of twenty-one years and have a good moral character.

2. He must have notified the Dean on or before the first day of April of the college year, in writing, of his intention to apply for and to take the final examinations of this College; said application being accompanied by the examination fee of twenty-five dollars, all previous fees having been paid.

3. He must have previously met all the matriculation requirements of this College; and must have attended at least four full courses of lectures, recitations, laboratory work, and clinics, in an accredited medical college whose requirements are equal to those prescribed by this College, no two courses having been done in the same year, and the last course having been taken in this College. If the student has attended courses in another medical college recognized by this institution he must have satisfied the Judicial Council, through the Dean, regarding his standing and his proficiency in the branches completed, either by examination or otherwise, as the Judicial Council may elect.

4. He must have completed the required courses in all the departments of the College, and his percentage of attendance must have been at least 80 per cent in all departments, and his percentage of proficiency on examination must not have been less than 80 per cent in all the branches indicated in our curriculum.

5. He must be present at the time and place scheduled by the Dean for final examination. His absence from an examination in a given department will indicate failure in that department, and will be entered as such against the student.

6. He must undergo a written final examination (or both written and oral, if required) in all departments. Each paper must be written in English; and the penmanship, orthography, punctuation, and general style and characteristics of each paper will be considered.



7. He must be free from demerit marks, must have discharged all conditions in each and every department, and must be present at the Commencement Exercises, unless excused in writing by the Dean.

### **COMBINED SEVEN-YEAR COURSE FOR THE DEGREE OF A.B. AND M.D.**

Students who have matriculated in the College of Liberal Arts of the University, and who plan to study medicine, may so combine the four-year course for the A.B. degree with the four-year course for the M.D. degree as to take both degrees in seven years.

### **COMBINED COURSE FOR THE DEGREE OF A.M. AND M.D.**

Students holding the A.B. degree from recognized colleges and who enter the Freshman class of the College of Physicians and Surgeons, may matriculate in the Graduate Department of the College of Liberal Arts, thus becoming candidates for the A.M. degree. Registration in the Graduate School may be made at any time before the opening of the Junior year. The candidate pursues advanced study along some special line and submits a thesis embodying original research. The degree of Master of Arts is given to the candidate upon the completion of the requirements for the advanced degree.<sup>1</sup>

<sup>1</sup>For specific statement of the conditions of the A.M. degree taken under this provision, see page 53.

## **FEES AND EXPENSES**

### **College Fees**

Matriculation Fee (paid but once).....	\$ 5.00
Tuition Fee (payable in advance), per year.....	150.00
Final Examination Fee, Senior year (not returnable)....	25.00
Chemistry laboratory fee, Freshman year.....	10.00
Physiology, pharmacodynamics, and toxicology laboratory fee, Sophomore year.....	10.00

Other general laboratory fees, per year.....	5.00
County Hospital Ticket (Junior and Senior years only)	5.00

This ticket entitles the holder to clinical privileges in the County Hospital and applies to all students in attendance there.

A deposit of \$10 is required of each student to cover breakage and damage to buildings and equipment. The unexpended balance is refunded at the close of the year.

A rental of \$5 per year for microscope and of \$2 per year for immersion-lens is charged for their use in Histology, Embryology, Bacteriology, Microscopy and Pathology. The student will be charged for all breakage in any of the laboratories.

These fees are payable in advance each year. If not paid within **four weeks** of the beginning of the course, the right to attend lectures may be forfeited. No student will be permitted to take an examination who is in arrears for fees; and no advanced standing whatever will be given a student under such conditions.

### **Expense of Living in Los Angeles**

The student can live in Los Angeles as in other large cities, moderately or extravagantly, according to his means or his habits of life. Good room and board near the College may be had for \$25.00 per month.

### **Places of Association and Recreation**

The students of medicine in this College, as in other medical institutions throughout the country, come from various walks of life; and each naturally seeks for himself a continuation of those environments which have shaped his previous mode of living. This city affords opportunities for the gratification of all tastes. Churches of all creeds and denominations are found here. The Y. M. C. A. is strong and influential, and extends a cordial welcome to young men who seek the refining influences of this splendid association. The Y. W. C. A., working along the same lines, is ever ready and anxious to serve the young woman who may wish to have

thrown about her a Christian influence and a friendship that does much to assist and to protect. There are also numerous clubs, social and political; lodges and societies of all kinds; high-class theaters and places of amusement; and, in fact, all things that serve at times to relieve the student's mind from the strain of college work.

### **PRIZES TO BE AWARDED, SESSION 1915-16**

The Faculty will give a prize to that member of the Freshman Class who obtains the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Sophomore Class who obtains the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Junior Class who obtained the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Senior Class who obtains the highest general average in the final examinations upon the studies of that year.

#### **Surgery Prize**

Professor James H. Seymour will give a prize to the member of the Senior Class who obtains the highest general average throughout the year in the department of Surgery. Attendance, class and clinic work, general department and efficiency will count in the awarding of this prize.

#### **Gynecology and Abdominal Surgery Prize**

Professor Charles W. Bryson will give a prize to the member of the Senior Class who obtains the highest general average throughout the year in the department of Gynecology and Abdominal Surgery. Attendance, class and clinic work, general department and efficiency will count in the awarding of this prize.

### **Hospital Positions**

Internships and appointments in hospitals throughout the city and in surrounding towns are available to graduates from this college; in fact, in the past we have been unable to fill the positions open to appointments.

### **HOW TO REACH THE COLLEGE**

Upon arrival in the city, go directly to the office of the Dean, Dr. Charles W. Bryson, 810 Citizens National Bank Bldg., Fifth and Spring Sts., make known your wishes, and present your credentials. You will receive the most courteous treatment, and full information will be given you on all subjects pertaining to the College, either by the Dean in person, or by his secretary. The Clerk of the College will be instructed to assist you in selecting suitable quarters, and each member of the Faculty, as well as many students of the school, will endeavor to make you feel at home. The term opens for registration on the 30th of August and instruction begins promptly on the 5th of September in all departments.

Address applications for catalogues and all other communications to the Dean,

DR. CHARLES W. BRYSON  
810 Citizens National Bank Building,  
Los Angeles.

### **Departments of Instruction**

The order of the studies pursued in this College is determined by the so-called "concentration method." The school year is divided into three trimesters. During the first trimester the student concentrates his attention upon a limited number of subjects; in the following trimester, the center of interest is shifted for the time being; and at a later date the earlier material is again taken up for further emphasis and



development. Experience has shown this arrangement of the schedule to possess marked advantage in flexibility of adjustment and thoroughness in the results achieved.

## A GENERAL OUTLINE OF THE DEPARTMENTS OF INSTRUCTION

A recent reclassification of the various departments of the College has effected a more intimate correlation of the instruction in related subjects. Medicine is a practical science; and in building the foundation upon which must rest the superstructure of advanced medical knowledge, there should be a grouping of the departments that necessarily combine at each stage of the process in order to secure more solidarity in instruction and greater concentration of purpose. Therefore Anatomy, Histology, and Embryology are placed under one control, or in one department, as each deals with normal anatomical structures. Physiology, Pharmacodynamics and Dietetics; and Chemistry, Toxicology and Hygiene have been similarly grouped to facilitate the demonstration of the action, in different stages of administration, of drugs upon various animal organisms. Pathology, Bacteriology, and Clinical Microscopy are grouped together for reasons quite apparent. Materia Medica and Therapeutics, including Pharmacognosy, form Department IV, although Applied Therapeutics is taught throughout in the Department of Medicine, where it rightfully belongs. The Department of Medicine includes the allied departments of General Medicine, including Clinical Medicine, Physical Diagnosis, Neurology, Psychiatry, Pediatrics, Jurisprudence, Ethics, and Economics, Dermatology and Syphilography, as these various subjects are essentially medical. Department VI embraces those departments essentially surgical, or into which surgery at one stage or another largely enters, as General Surgery (including Orthopedic Surgery, Fractures, and Dislocations), Genito-Urinary Diseases, Ophthalmology, Otology, Laryngology, and Rhinology. Division VII embraces Obstetrics, Gynecology and Abdominal Surgery.



The student body is divided into several groups in all departments, thus bringing each individual member of the class not only into close personal touch with the subject under consideration, but also into close personal contact with his instructor. There is systematic didactic instruction in all departments, intermingled with such laboratory, clinical and recitation periods as may be necessary to give the student a broad and comprehensive view of each subject.

Below will be found tabulated the grouping of subjects as embraced in our curriculum.

- Division I. Anatomy, Histology, and Embryology.
- Division II. Physiology, Pharmacodynamics, and Dietetics.
- Division III. Chemistry, Toxicology and Hygiene.
- Division IV. Pathology, Bacteriology, and Hygiene.
- Division V. Materia Medica, Pharmacognosy, and Therapeutics.
- Division VI. Medicine and Medical Specialties.
- Division VII. Surgery and Surgical Specialties.
- Division VIII. Obstetrics, Gynecology and Abdominal Surgery.

## **DIVISION I. ANATOMY, HISTOLOGY AND EMBRYOLOGY**

HARRY OSCAR WHITE, M.D.,  
Professor of Anatomy, Histology, and Embryology  
CLARENCE HOLMES CRILEY, Ph.B., M.D.  
Associate Professor of Anatomy  
MILES GUTHRIE VARIAN, M.D.  
Instructor in and Demonstrator of Anatomy

### **Description of the Course and the Method of Instruction in Human Anatomy**

This department aims to present the subject of Human Anatomy in a thoroughly scientific and practical manner. The laboratory work is done under constant surveillance. The student is required to take frequent individual quizzes upon the cadavar; to demonstrate all parts dissected to a

competent demonstrator; and to attend class quizzes and an individual oral final examination. The lectures supplement the laboratory work, dealing with such facts from embryology and comparative vertebrate anatomy as will give breadth to the student's view of the field. In connection with the laboratory work, lectures are delivered, reviewing the work that has been completed, calling attention to the relations and significance of the parts that have been studied, and elucidating, with the aid of specially prepared anatomical charts, diagrams, and imported models, the anatomy of difficult and important structures. Especial pains are taken to emphasize the broader morphological significance of the details of Human Anatomy. With a view to introducing students properly to the study of Practical Anatomy, they are taught by section demonstration how to dissect and what to seek in the part to be dissected. Besides the demonstrators who are detailed to guide the student through the various steps of dissection, a specially prepared anatomical outline on every region of the human body is furnished to the student for his guidance. The aim is to stimulate exactness of observation, independence of judgment, and accurate and careful technique in practical dissection on the part of the student. The descriptive course in Anatomy is conducted by means of lectures, recitations, demonstrations on the cadaver, dry and wet anatomical preparations, and charts and models, of which latter liberal use is made. In the course of Neurology the student dissects a sheep brain in order to gain some knowledge of the morphological relations of the divisions of the brain, and then makes a careful study of the human brain and spinal cord by means of horizontal, coronal, and sagittal sections, which is further followed by a microscopic study of the central nervous system and the organs of the special senses.

The dissecting material is abundant, thoroughly preserved by the latest scientific processes of embalming, scrupulously clean, and absolutely free from offensive odor or infective qualities.

Students who are suitably qualified and physicians who desire to do advanced work in Anatomy will receive every encouragement that the department is able to offer.

From among those students who show the greatest proficiency, prosectors are appointed who do special dissection work and quizzing under the direction of the professor and assistants.

### (a) GROSS ANATOMY

**Course I. Freshman Anatomy.** Includes the study of Osteology, Anthrology, Myology, Angiology (including the heart), Respiratory and Digestive Systems, Neurology of the extremities, and dissection of the upper and lower extremities.

Lectures and Recitations.....	144 hours
Laboratory Exercises .....	360 hours
Professor White and Assistants.....	504 hours

**Course II. Scphomore Anatomy.** Includes the study and dissection of the Head, Neck, Thoracic and Abdominal organs, the Perineum, Ductless Glands, Genito-Urinary Organs, the Respiratory, Circulatory, and Digestive Systems, the organs of the Special Senses, the Human Brain, the Spinal Cord, and the Sympathetic Nervous System.

This course is a continuation of that of the first year but from the standpoint of the application, and not as an abstract science. It embraces the outlines, positions, and relations of the various organs and the means of recognizing them, thus giving a knowledge necessary for diagnostic and operative purposes.

The bones are studied individually and collectively, the student pointing out and describing the different parts from actual specimens. Bones are lent to the students for private study.

Lectures, Demonstrations, and Recitations..	84 hours
Laboratory Exercises .....	144 hours
Professor White and Assistants.....	228 hours

**Course III. Surgical Applied Anatomy and Operative Surgery** on the cadaver is taught in the third year.

Associate Professor Criley.....	36 hours
---------------------------------	----------

**(b) HISTOLOGY**

**Course I.** Elementary Histology is given during the Freshman year. The study of fresh tissues, disassociation methods, and the technique for the preparation of fixed and hardened tissues are given the student. All the elementary tissues of the body, including normal blood, etc., are studied.

Professor White and Assistants.....144 hours

**Course II.** Four hours per week are devoted to the Histology of the central nervous system during the last trimester of the Sophomore year.

Professor White and Assistants..... 72 hours

**(c) EMBRYOLOGY**

Three hours each week of didactic instruction and four hours a week of laboratory work are devoted to the subject of Embryology during the last trimester of the Freshman year. Lectures and quizzes on the structure of germ cells, the decidua, and the placenta are given at the beginning of the course. Following this, the student is required to prepare and mount embryo chicks, illustrating development up to and including the differentiation of the somites.

Lectures and recitations in human embryology are a part of this course. The students are required to make drawings and diagrams of the folding in of the layers of the embryo, including the histology of the foetal membranes. The complete histogenesis of the principal organs of the body is studied. The students are required to prepare their own sections, from which demonstrations and drawings are made.

The equipment in this department is complete and consists of incubators, charts, models, and all the usual necessary histological and embryological material.

Professor White and Assistants..... 84 hours

**TEXTBOOKS:****Anatomy**

Cunningham; Cunningham's "Manual of Dissection,"; Piersol; Morris; Gray.



Atlases and Collateral Reading: Quain's "Anatomy"; Holden; McClellan's "Regional Anatomy"; Deaver's Surgical Anatomy"; Edinger's "Anatomy of the Nervous System"; Huntington's "Anatomy of the Peritoneum and Abdominal Cavity"; Sobotta and McMurrich's "Atlas of Human Anatomy"; Toldt's "Atlas of Human Anatomy"; Spalteholz's "Atlas of Anatomy."

### **Histology**

Bailey; Bohm; Davidoff; Piersol; Schaeffer.

### **Embryology**

Bailey; "Human Embryology" by Kieble and Mall; McMurrich; Heissler; Prentiss.

## **DIVISION II. PHYSIOLOGY, PHARMACODYNAMICS AND DIETETICS**

FREDERICK S. HAMMETT, A.B., M.S., A.M., Ph.D.  
Professor of Physiology, Pharmacodynamics and Dietetics

LYMAN BRUMBAUGH STOOKEY, A.M., Ph.D.  
Professor of Experimental Physiology

JOHN A. LARSON, A.B., A.M.  
Instructor in Physiology

### **(a) PHYSIOLOGY**

Instruction in this department is given by lectures, laboratory exercises, demonstrations, and recitations. The laboratory exercises enable the student to acquire a direct acquaintance with experimental methods. The chief ends sought in the laboratory exercises are precision in conducting experiments, accuracy in observation, and logic in deduction.

Formal written examinations in each course of this department are held at intervals.

The assistantships in this department are honor positions and are awarded according to scholarship and fitness.

**Course I. Physiology of the Cell.** (First year students.) Three hours lectures, four hours laboratory, and two hours recitations, during the second trimester.

The cell is studied as an elementary organism, emphasis being laid on it as the seat of vital processes. Special atten-



tion is given to the structure and chemistry of protoplasm, chemical reactions in the cell, irritability, contractibility, tropisms, and the development of multicellular from unicellular organisms.

**Course II. Physiology of Muscle and Nerve.** (First year students.) Three hours lectures, four hours laboratory, and two hours recitations, during the second trimester.

Kymographical records are made by each student. The laboratory exercises include a study of the following: Mechanical, thermal, chemical and electrical stimulation of muscle and nerve, indirect stimulation of muscle, changes in intensity of stimulus, minimal and maximal stimuli, influence of duration of stimulus, laws of contraction, natural tetanus, artificial tetanus, elasticity and extensibility of muscle, influence of temperature and load on muscular contraction, contraction of human muscle, ergograph, electrotonus, fatigue of muscle, fatigue of nerve, muscle currents, velocity of nerve impulse, and the conditions affecting excitability of nerve.

**Course III. Physiology of Circulation, Blood, and Lymph.** (First year students.) Three hours lectures, four hours laboratory, and two hours recitations, during the third trimester.

Graphical records are kept by each student. Most of the experiments are carried out on the frogs' heart. Among the topics studied in the laboratory are: Staircase character of heart-beats, cardio-inhibitory center, latent period of cardiac muscle, effect of vagus on heart, action of atropin, muscarin, pilocarpin and nicotin on heart, constant current of heart, perfusion of fluids through the heart, eudocardiac pressure, action of the heart valves, reflex inhibition of the heart, sphygmograph, blood pressure in different parts of the vascular system, red cell count, white cell count, differential count, colorimetric estimation of haemoglobin, spectroscopical examination of haemoglobin and its derivatives, haemorrhage and regeneration coagulation.

**Course IV. Physiology of Respiration, Reproduction, Animal Heat.** (First year students.) Three hours lectures, four

hours laboratory, and two hours recitations, during third trimester.

The laboratory exercises embrace a study of the following: Movements of the chest wall, vital capacity, respiratory waves of blood pressure, variations of intrathoracic pressure, gases of the blood, reflex stimulation of the respiratory center, relation of afferent fibres of vagi to the respiratory center, the respiratory quotient and its variations, modified respiratory movements, calorimetry, etc.

**Course V. Physiology of Digestion, Absorption, Secretion, Excretion, and Metabolism.** (Second year students.) Two hours lectures, six hours laboratory, and one hour recitations, during the first trimester.

**Course VI. Physiology of the Central Nervous System and the Sense Organs.** (Second year students.) One hour lecture and one hour laboratory or recitation during the first trimester.

The physiology of the central nervous system is studied. Emphasis is laid upon reflex action, reaction time, localization of functions in cerebrum, the motor and sensory tracts in central nervous system, and physiological optics.

**Course VII. Advanced Physiology.** (Elective.) Alternate years.

This course consists of a detailed study of special subjects in Physiology, and includes the reading of original investigations along lines to be assigned, and the performance of laboratory experiments. Each student electing this course is required to carry out a complete metabolism experiment.

**Course VIII. Operative Physiology.** (Elective.) Alternate years.

This course consists of a detailed study of special subjects in Physiology, and includes the reading of original investigations along lines to be assigned, and the performance of laboratory experiments. Each student electing this course is required to carry out a complete metabolism experiment.

The object of this course is to acquaint the student with the more common operative procedure in physiological investigation. The following operations are performed on the dog: Gastric, biliary, and pancreatic fistulae; Eck's operation, splenectomy, thyroidectomy, nephrectomy, pancreatectomy, gastroenterostomy, colectomy.

**Course IX. Pathological Physiology.** (Second year students.) One hour lecture and one hour recitation during part of the first trimester.

Among the subjects discussed are: Disturbances in the dog digestive secretions, starvation, overeating, obesity, disturbances in the metabolism of carbohydrates, fats, and proteins, qualitative changes in metabolism, production of organic acids, disturbances in the secretion of bile, alkaptonuria, cystinuria, pathological alterations in blood pressure, exudates, metabolism in fever anaemia, and other pathological conditions.

**Course X. Physiological Conference.** (Elective|)

Those who are interested are invited to meet at times to be announced to discuss informally selected problems in Physiology, usually such as supplement instruction given in other ways. Problems under investigation in the laboratory are introduced for discussion.

**Course XI. Original Investigation.** (Elective.)

Those who are qualified are encouraged to undertake research work. A reading knowledge of French and German is desirable.

#### **Total Number of Hours in Entire Course**

Freshman Physiology—132 hours didactic, 216 hours laboratory.

Sophomore Physiology—36 hours didactic, 120 hours laboratory.

Prof. Hammett and Mr. Larson (168 hours didactic, 336 hours laboratory).

Total .....504 hours

**(b) PHARMACODYNAMICS**

**Course I. Physiological Action of Drugs.** (Second year students.) One hour lecture, one hour demonstration or recitation and six hours laboratory, second trimester.

This course consists of a study of the change induced in the living organism by the administration of the more common and important drugs. Laboratory demonstrations supplement the lectures.

Prof. Hammett and Mr. Larson (60 hours didactic,  
120 hours laboratory.)

Total .....180 hours

**Course II. Advanced Pharmacodynamics.** (Elective.) Alternate years. One hour lecture and two hours laboratory weekly during the first trimester.

In this course a study is made of the physiological changes induced in the body by the less frequently used drugs. The relation between chemical constitution and pharmacological action is considered in studying some of the newer synthetical drugs.

**(c) DIETETICS AND NUTRITION.** (Second year students.)

Two hours lecture and recitation during first trimester.

The lectures treat the following subjects: Specific dynamic action of the different foods, calorific requirements, construction of a diet from the different articles of food, nitrogenous equilibrium, nutrition during the period of growth, inorganic foods, some mineral waters, accessories to food, influence of mechanical work upon metabolism, diets in some pathological conditions.

Prof. Hammett.....24 didactic hours

**Reference Books:**

Physiology—Freshmen: Stewart.

Sophomores: Starling.

Pharmacodynamics—Greene, Pembrey and Phillips.

Dietetics—Bryce, Modern Theories of Diet.

**DIVISION III. CHEMISTRY, TOXICOLOGY AND  
HYGIENE**

**CHARLES GEORGE MACARTHUR, A.M.**  
Professor of Chemistry, Toxicology and Hygiene

**CLARENCE BARBRE, A.B., B.S., M.S.**  
Instructor in Physiological Chemistry

**(a) CHEMISTRY**

The following courses, included under the general subject of Chemistry, are given in the Freshman and Sophomore years: General Organic Chemistry, Toxicology, and Physiological Chemistry. The needs of the medical student are especially considered in these courses, and the instructions and laboratory work made as practical as possible as viewed from the physician's standpoint, rather than from that of the chemist. The subject matter is presented by conferences, discussions, and reports. A large number of hours are devoted by the individual student in the laboratories to practical work under the supervision of the head of the department and under the guidance of competent assistants.

**Course I. General Organic Chemistry.** (First year students.)

After a brief survey of Inorganic Chemistry, will be considered the more important of the Carbon Compounds, such as hydrocarbons, alcohols, aldehydes, ketones, acids, ethers, esters, carbohydrates, the benzene series and derivations, etc., including their occurrence in nature, their close relations to one another, the structure of their molecules and determination of formulae, analysis of organic compounds, and the synthesis of the more important organic substances. This course deals with the chemistry of the common carbohydrates, fats and proteins, including those which occur in the body.

**Course II. Toxicology.** This course is given in conjunction with the course in organic laboratory work, and consists of a study of the action of the various poisons, both inorganic and organic, upon living tissues, the symptoms produced, the preparation and administration of chemical anti-



dotes and other means of treatment, together with approved methods for the detection of poisons in stomach contents or in tissues.

Total number of hours in Courses I. and II. Prof. MacArthur (Freshman year, conferences and discussions, 72 hours; laboratory work, 144 hours. Total, 216 hours).

**Course III. Physiological Chemistry.** Instruction in Physiological Chemistry is given during the third trimester of the second year. The course will consist of lectures and quizzes of one hour daily and two hours laboratory work on each of five days in the week. A systematic survey of the whole field of physiological chemistry will be taken, beginning with the chemistry of the secretions, the chemistry of the foodstuffs, the blood, and the various tissues, particular attention being given to approved methods of analysis of the gastric contents, urine and feces.

Prof. MacArthur (60 hours class room work and 120 hours laboratory. Total, 180 hours).

**Course IV. Analysis of Foods.** (Elective.) Three hours weekly during the second trimester of Freshman year. The more common methods employed in the analysis of foods are taught, with emphasis upon the more frequently used adulterants and preservatives and their detection.

**Course V. Water Analysis.** (Elective.) Three hours weekly during the third trimester of Freshman year. The student choosing this course is given an opportunity to familiarize himself with the methods used in the chemical analysis of water.

**Course VI. Chemical Conference.** (Elective.) Those who are interested are invited to discuss informally, at times to be announced, selected problems in medical chemistry, usually such as supplement instructions given in other ways. Problems under investigation in the laboratory are introduced for discussion.

**Course VII. Biochemistry of Nerve Tissue. (Elective.)**

Conferences for two periods a week during the first trimester.

A careful study of the chemical constituents and chemical processes of the various parts of the nervous system will be made.

Open to those only who have had Course 3.

**Course VIII. Research. (Elective.)**

Those interested in Biochemistry may develop an original piece of work. Any number of hours desired may be devoted to the investigation.

**(b) HYGIENE**

Owing to the rapid advances which have been made in the science of medicine in the last few years, State Medicine and Hygiene has become a very important branch of this science. The subject is taught by reports and laboratory work for 36 hours in the Junior year and 72 hours class room work throughout the Senior year.

Hygiene as applied to preservation of health and prevention of disease will be studied, especial attention being given to the pure food law, adulterations, dilutions and labeling, etc. School room and sick room hygiene will be covered. Especial consideration is given the subject of Eugenics and the effect of hereditary influences on health. Hygiene of air, soil, water, climate, food and diet; food supply, food disease and adulterations; heating, lighting and ventilating of dwellings; municipal sanitation and water supply, sewage and drainage, disposal of refuse; the prevention of contagious diseases, including tropical diseases; the laws regulating quarantine, etc.; in fact, all branches of Preventive Medicine, Hygiene and Sanitation will be thoroughly given. In order that the importance of this branch may be more fully impressed on the student, eighteen hours during the year will be devoted to work in the laboratory. At this time the student will be required to make chemical and bacteriological

analyses of water, milk and butter, together with tests for preservatives in canned meats, fruits and vegetables.

Prof. MacArthur (Junior year, 36 hours; Senior year, 72 hours).

Total .....108 hours

## **DIVISION IV. PATHOLOGY, BACTERIOLOGY AND CLINICAL MICROSCOPY**

**RALPH L. BYRNES, B.S., M.S., M.D.**

Professor of Pathology, Bacteriology and Clinical Microscopy

**T. W. KEMMERER, B.S., M.S., M.D.**

Assistant Professor of Pathology and Bacteriology

**LOUIS E. VIKO**

Assistant in Pathology, Bacteriology and Clinical Microscopy

### **(a) PATHOLOGY**

The subject-matter in this department is taught by lectures, recitations, demonstrations with projectoscope and charts, gross and microscopical specimens, laboratory work, and autopsies.

The general subject of Pathology will be given in the following courses:

**Course I. General Pathology.** This course is given to the Sophomore class throughout the year.

The general principles underlying pathological changes are thoroughly inculcated, and the fundamental morbid processes taken up in the following order, viz.: Extrinsic and Intrinsic Causes of Disease, Autointoxications and Secondary Diseases, the Protective and Healing Forces of the Human Organism, the Acquiring of Immunity, Disturbances of Circulation of the Blood and of the Lymph, Retrograde Disturbances and Infiltrations, Hypertrophy and Regeneration, Inflammation, Diseases Produced by Bacteria, Protozoa, Yeasts and Moulds, Neoplasms, Malformations.

Technique of preparing specimens. This course is given to the Sophomore class and consists of practical instruction in preserving, fixing, embedding, cutting, mounting and staining of sections.

There is a full equipment of embedding ovens, microtomes, microscopes and other accessories for thorough instruction.

Considerable attention is given to this work, for proper technique is fully as requisite as ability to recognize what the microscope reveals, since correct diagnosis in many cases depends upon the skill with which a specimen has been prepared.

The material for this course is obtained from the department's stock, which is being continuously accumulated from autopsies, operations in the hospital and surgical clinics, and contributions of surgeons from this and other cities.

Lectures and recitations, 120 hours; laboratory work,  
276 hours.

Total .....396 hours

**Course II. Special Pathology.** This is taught in the Junior year, and includes the study of the fundamental and general pathological processes when occurring in special organs or system, and will be taken up in the following order, viz.: Circulatory System, Respiratory System, Digestive Tract, Liver, Spleen, Pancreas, Urinary System, Male Organs of Reproduction, Female Organs of Reproduction, Muscles, Bones, and Central Nervous System.

This course is given by lectures and recitations in connection with demonstrations with charts, projectoscope, and specimens.

Microscopical specimens representing nearly all the known lesions of pathology will be furnished the student by the department. Each student is required to make drawings of the lesions represented, and whether such student have artistic ability or not, this work compels his attention to dwell upon the essential features of pathological histology, and aids him to acquire a more thorough knowledge of the minute structural changes of pathology than any other method of instruction.

Lectures, recitations, and laboratory, total....72 hours

**Course III. Gross Pathology and Autopsies.** The gross appearance and naked eye tests, such as the iodine test for

amyloid material, are taught in this course. The material for this course is obtained from operations and autopsies and from the museum belonging to this department.

Approved methods of making autopsies are demonstrated to the students in sections, at the County Hospital, but they will also be required individually to take turns in assisting the demonstrator, and in writing up the autopsy, with macroscopic and microscopic findings.

48 clinical hours each section.

**Course IV. Post-Graduate Course.** This will be given to physicians and others desiring to take up work along special lines in pathology. The number of hours that shall be given to this course will depend upon the desire of the applicants, and the course will be given only in case there is a sufficient number of applicants to justify the expenditure of time that must be given to make it a profitable course.

## **(b) BACTERIOLOGY**

The subject of Bacteriology is taught by lectures, recitations, and laboratory instruction throughout the first trimester of the Sophomore year.

**Course I.** The didactic work is thorough and complete, the first half of the course including the classification, physical and chemical structure of the bacteria in general, as well as the products of their biological activities, and particularly the antibodies, the opsonic substances, and the theories of infection and immunity relating to the various pathogenic micro-organisms, while the second half of the course covers the identification, the staining, cultural and other biological characteristics of the various species of pathogenic bacteria, as well as the pathogenic protozoa, yeasts and moulds. During the second half of the trimester a course of lectures is given on the more important parasites, including the Protozoa, the Helminthes, and the Arthropoda, with the demonstration of such specimens as the museum may contain at the time during which these lectures are given.



**Course II.** The laboratory work is comprehensive, and aims to be as practical as possible. The student is made familiar with approved methods of technique by requiring him to actually perform the work done in bacteriological laboratories, from the preparation of staining fluids and of culture media to the cultivation and inoculation of the different organisms.

The laboratory in which the students are required to make their culture media is equipped with autoclave, steam sterilizers, hot air ovens, scales, etc., for each group of five students, while individually each is supplied with stew pan, gelatin, agar, peptone, culture tubes and every accessory for making all the commonly used media. The student makes and sterilizes his own media, which are kept for him in the ice chests belonging to this department.

The laboratory for the inoculation and cultivation is furnished with lockers, incubator, etc., while each student is furnished with a complete staining outfit and microscope with oil immersion lens.

(60 hours lectures and 120 hours laboratory.)

Total .....180 hours

### **(c) CLINICAL MICROSCOPY**

This course is given every day during the first trimester of the Junior year. Practical laboratory work will constitute the chief part of this course, with a sufficient number of lectures to cover the subject-matter in a systematic and thorough manner. The blood, urine, sputum, gastric contents, feces, exudates, etc., will be studied in regular order, together with the principles and technique of such subjects as the agglutinative tests, the opsonins, precipitins, hemolysins, preparation of bacterins, complement fixation tests as applied by Wasserman and Noguchi, etc. Material for class and individual work will be obtained from the daily clinics in charge of the school and from the Los Angeles County Hospital. The subjects are considered and its clinical material studied with particular reference to their bearing upon the diagnosis

of disease and all the approved methods, microscopical, bacteriological, and chemical, are taught and demonstrated.

(Lectures, 12 hours; Laboratory, 96 hours.)

Total .....108 hours

### TEXT BOOKS:

#### Pathology:

"Pathology," McFarland; "Principles of Pathology, General and Systemic," Adami and Nicholls; "Diagnostic Methods," Webster; Coplin; Delafield and Prudden.

#### Bacteriology:

Park's "Pathogenic Bacteria and Protozoa;" Jordan's "General Bacteriology;" Muir and Ritchie; and MacFarland's "Pathogenic Bacteria."

## DIVISION V. MATERIA MEDICA, PHARMACOGNOSY, AND THERAPEUTICS

EDWARD DOUGLASS JONES, M.D.

Associate Professor of Therapeutics

HARRY M. BRANDEL, M.D.

Instructor in Therapeutics

OTTO BAMES, M.D.

Instructor in Materia Medica

**Course I.** Each drug is first considered in its crude and primary state; then the botany of the various plant and vegetable elements entering into the basic principles of our materia medica is studied, together with the different alkaloids of each; and finally the mineral elements, both basic and analytic, from the viewpoint of materia medica. This department is supplied with crude drugs and standard preparations for direct demonstrations, which enable each student to familiarize himself not only with the appearance, but also with the odor, the taste, and the general characteristics, of each. Laboratory facilities are at hand for demonstrating the pharmacognosy and the pharmacology of each drug and compound, while the student is referred to the Department of Physiology for the pharmacodynamics of elementary drug therapy. Two hours weekly, throughout the second trimester of the first year.

Dr. Bames.....24 hours

**Course II.** Advanced materia medica (including prescription writing, dosage, etc., in all of its complications), and an outline of elementary therapeutics and toxicology. This is given with a view to preparing the student for applied therapeutics, as taught in the Department of Therapeutics and General Medicine. The student must know *Materia Medica* as well as Pharmacognosy, Pharmacology, and the Pharmacodynamics of drugs before he can know drug therapy. Three hours weekly, third trimester of the Sophomore year.

Dr. Bames .....36 hours

**Course III. Therapeutics.** The method of instruction is principally didactic, with reviews from time to time, supplemented by clinical construction at regular periods. An outline of classification of therapeutic remedies based upon their physiological action and clinical results is supplied at the beginning of the term. Under each division and subdivision of this outline, the most important drugs of each class, together with their preparations, derivatives, and compounds, are briefly reviewed physiologically, and then successively studied therapeutically in detail. The most important feature to be impressed upon the student is the application of certain remedies and measures to the cure or alleviation of certain pathological conditions as found at the bed-side, in accordance with the recognized physiological action of the remedies or class of remedies under discussion. Three hours weekly second and third trimesters of the Junior year.

Dr. Brandel.....72 hours

**Course IV. Therapeutics.** The class is divided into sections of some four to ten members each and to each section are assigned from time to time certain patients afflicted with the disorder to be studied. The individual students are required to write complete histories of the cases presented, and to outline methods of management according to their own previous knowledge. During a class conference they are then corrected, criticized, quizzed, and instructed in the various recognized methods of treatment and management of the

diseases under consideration, this method being supplemented with didactic teaching. One hour weekly, throughout the Senior year.

Associate Professor Jones.....36 hours

**TEXT BOOKS:** Shoemaker; Potter; Butler; Wood; Forchheimer.

## DIVISION VI. MEDICINE AND MEDICAL SPECIALTIES

FREDERICK A. SPEIK, S.B., M.D., THOMPSON B. WRIGHT, A.M., M.D., Professors of Medicine

FRANCIS OLIVER YOST, M.D., Professor of Pediatrics

JAMES TUCKER FISHER, M.D., Professor of Neurology and Psychiatry

CHARLES C. MANGER, Ph.G., M.D., Professor of Neurology

CHARLES C. BROWNING, M.D., F. M. POTTENGER, A.M., M.D., LL.D., Professors of Diseases of the Chest

ALBERT SOILAND, M.D., Professor of Roentgenology

WALTER F. WESSELS, M.D., HENRY HERBERT, M.D., Associate Professors of Medicine

ANSTRUTHER DAVIDSON, C.M., M.B., M.D., Associate Professor of Dermatology

EDWARD DOUGLASS JONES, M.D., Associate Professor of Therapeutics

HENRY DIETRICH, M.D., Associate Professor of Pediatrics

JOHN VINCENT BARROW, M.D., Assistant Professor of Medicine

PETER C. REMONDINO, M.D., Lecturer on the History of Medicine and Medical Bibliography

H. E. McDONALD, M.D., Lecturer on Life Insurance Examination

GEORGE L. GREER, A.B., LL.B., Lecturer on Medical Jurisprudence

LEWIS D. REMINGTON, M.D., Lecturer on Diseases of the Chest

FRANK JAMES LEAVITT, M. D.; A. F. MAISCH, M. D., ARTHUR STANLEY GRANGER, A.B., M.D., Lecturers on Medicine

R. S. CUMMINGS, M.D., DWIGHT S. MOORE, M.D., Instructors in Medicine

M. J. ROBERTS, M.D.; J. EUGENE FAHY, A.B., M.D.; LEON SHULMAN, M.D., HERMAN SUGARMAN, M.D., G. E. PATRIC, M.D., R. C. MacCLOSKEY, M.D., Instructors in Diseases of the Chest

A. J. SCOTT, Jr., M.D., Instructor in Pediatrics

WM. B. KERN, M.D., Instructor in Psychiatry

H. GALLAGHER, M.D.; ROBERT B. HILL, M.D.; A. F. GODIN, M.D.; CHESTER H. BOWERS, A.M., M.D.; ADRIAN B. PERKEY, M.D.; FRANK CROWELL BISHOP, M.D.; LOUIS M. KANE, A.B., M.D.; JOHN MARK LACEY, M.D., Instructors in Medicine

ROBERT M. DUNSMOOR, M.D., Instructor in Electrotherapy

### (a) MEDICINE

**Course I. Normal Physical Diagnosis.** Three hours each week, during the third trimester of the Sophomore year, are



devoted to lectures and demonstrations in Normal Physical Diagnosis. This work includes the regional topographical anatomy of the body, the rules governing inspection, palpation, percussion, auscultation, mensuration, including a short course on the signs and symptoms of general diagnosis. In this course specific symptomatology is avoided.

Dr. Kane.....36 hours

**Course II. Didactic Physical Diagnosis.** In the Junior year one hour each week is given in didactic instruction on charts, models, by drawings, diagrams and on living subjects.

Associate Prof. Herbert.....36 hours

**Course III. Clinical Physical Diagnosis.** In the Junior year practical instruction is given Mondays at the County Hospital. History writing constitutes a material part of the work of this course.

Associate Professor Herbert, Doctors Leavitt, Shulman, Perkey, Godin and Gallagher (72 hours each section).

**Course IV. Junior Didactic Medicine.** During the Junior year three hours each week are devoted to didactic and recitative instruction. The work is of a thoroughly practical nature and embraces a study of Internal Diseases generally, Parasitic Diseases, Infectious Diseases, Constitutional Diseases and the Diseases of the Lungs, Heart and Blood-vessels, Liver, Stomach and Intestines, Pancreas, Kidneys, Spleen and Lymphatic System, Blood and Ductless Glands.

Prof. Wright, Associate Prof. Wessels, Drs. Leavitt and Shulman .....144 hours

**Course V. Junior Clinical Medicine.** Clinics and conference courses at the bedside in the Los Angeles County Hospital are given on Thursdays, 10 to 11 a. m., and Fridays, 10 a. m. to 12 m. (exclusive of the work given in Physical Diagnosis). This course is given in sections of eight students.

Prof. Wright, Prof. Browning, Drs. Cummings, Maisch, Granger, and Assistants.

Total.....120 hours each section



**Course VI. Senior Didactic General Medicine.** The Senior students receive two hours each week didactic and recitative instruction during the first and second trimesters and one hour each week during the third trimester, in General Medicine, covering the subjects given in clinic and conference at the Los Angeles County Hospital. See Course 10.

Prof. Speik, Associate Prof. Wessels, Dr. Barrow.

Total .....84 hours

**Course VII. Senior Tropical Medicine** is taught in the Senior year one hour each week for twenty-four weeks. Clinic cases are seen at the Los Angeles County Hospital whenever possible.

Dr. R. B. Hill, first and second trimesters.....24 hours

**Course VIII. Senior Infectious Diseases**, with special reference to Immunity, is taught in the Senior year, third trimester.

Dr. R. B. Hill.....12 hours

**Course IX. Senior Clinical Contagious Diseases.** Clinic and Conference course, with special reference to Applied Therapeutics.

First trimester, Section B (seven students), Dr. A.

J. Scott, Tuesdays, 8 to 10 a. m., 24 hours.

Second trimester, Section A (seven students), Dr. A.

J. Scott, Tuesdays, 8 to 10 a. m., 24 hours.

Third trimester, Section C (seven students), Dr. A.

J. Scott, Tuesdays, 8 to 10 a. m., 24 hours.

**Course X. Senior Clinical Medicine.**

(a) **Diseases of the Alimentary Tract and Liver.** Clinic and Conference course at the Los Angeles County Hospital.

First trimester, Prof. Speik, Tuesdays, 10 a. m. to 12 m., 24 hours.

Second trimester, Associate Prof. Wessels, Wednesdays, 10 a. m. to 12 m., 24 hours.

**(b) Infectious Diseases**, with special attention given to Applied Therapeutics, clinic and conference course at the Los Angeles County Hospital.

First trimester, Prof. Wright, Mondays, 10 a. m. to 12 m., 24 hours.

Second trimester, Prof. Speik, Tuesdays, 10 a. m. to 12 m., 24 hours.

**(c) Diseases of the Heart, Blood Vessels and Kidneys.** Clinic and Conference course at the Los Angeles County Hospital.

First trimester, Associate Prof. Wessels, Wednesdays, 10 a. m. to 12 m., 24 hours.

Third trimester, Prof. Speik, Tuesdays, 10 a. m. to 12 m., 24 hours.

**(d) Diseases of Blood and Ductless Glands**, with special reference to Applied Therapeutics. Clinic and Conference course at the Los Angeles County Hospital.

Second trimester, Dr. Barrow, Mondays, 10 a. m. to 12 m., 24 hours.

Third trimester, Associate Prof. Wessels, Wednesdays, 10 a. m. to 12 m., 24 hours.

**(e) Diseases of Metabolism and Constitutional Diseases.** Clinic and Conference course at the Los Angeles County Hospital, with special reference to Applied Therapeutics.

Third trimester, Dr. Barrow, Mondays, 10 a. m. to 12 m., 24 hours.

Total number of hours, Course 10.....216 hours

**Course XI. Senior Clinical Medical Tuberculosis.** Clinic and Conference course at the Los Angeles County Hospital. This course is given in sections of seven students.

First trimester, Prof. Browning and Assistants, 24 hours each section.

Second trimester, Prof. Browning and Assistants, 24 hours each section.

Third trimester, Prof. Browning and Assistants, 24 hours each section.

**Course XII. Senior Didactic Medical Tuberculosis.** One hour each week during the Senior year is devoted to didactic work in Medical Tuberculosis.

First trimester, Prof. Pottenger.....	12 hours
Second trimester, Prof. Browning.....	12 hours
Third trimester, Prof. Browning.....	12 hours
Total .....	36 hours

## (b) PEDIATRICS

**Course I. Junior Class. The Principles of Pediatrics.** A conference and didactic course comprising the anatomy, physiology and hygiene of infancy and childhood, and the dietetics of infancy, as a foundation for the work in the Senior Class.

Dr. Dietrich.....	60 hours
-------------------	----------

**Course II.** Senior Didactic and Recitative Instruction one hour each week.

Prof. Yost .....	48 hours
------------------	----------

**Course III.** A bedside clinic and conference course at the Los Angeles County Hospital.

Topics, first trimester, The Dietetics of Infancy, Infant Feeding.

Prof. Yost and Dr. Dietrich, Thursdays, 10-12..	24 hours
---	----------

## (c) NEUROLOGY AND PSYCHIATRY

**Course I.** The course in Neurology and Psychiatry in the Junior year consists of lectures, clinics at the College Dispensary and the County Hospital.

Professor Fisher and Dr. Kern (36 hours didactic and 24 hours clinical instruction each section).	
Total .....	60 hours

**Course II.** A course in Pathology of the Nervous System is given one hour each week during the second trimester and two hours each week during the third trimester of the Junior year.

Professor Manger .....	24 hours
------------------------	----------

**Course III. Senior Class. Neurology.** Didactic and Recitative conferences in Diseases of the Nervous System and Psychiatry.

Prof. Manger and Assistants, Thursday.....72 hours

**Course IV.** Clinic and conference course in Diseases of the Nervous System and Psychiatry at the Los Angeles County and Psychopathic Hospitals.

Prof. Manger and Assistants, Thursday, third trimester .....24 hours

#### (d) DERMATOLOGY

Dermatology, embracing within its scope Syphilography, has been taken from the Department of Genito-Urinary Diseases and placed in a separate department.

This course embraces one hour each week throughout the Senior year. The subject-matter covered will be the histopathology and bacteriology of the skin, the relations of diseases of the skin to other diseases and to other organs, the individual study of all cutaneous affections, and their diagnosis and latest methods of treatment, including X-ray therapy. The cutaneous manifestations of the various eruptive fevers and their diagnosis and clinical values, will also be considered. Syphilis and its effects, direct and remote, upon healthy and diseased organs, together with the most modern methods of diagnosis and treatment, will be thoroughly studied throughout the year.

Associate Professor Davidson (24 didactic hours, 24 clinic hours). Total.....48 hours

#### (e) ROENTGENOLOGY AND ELECTROTHERAPY

**Course I. Electricity.** One lecture a week is given in the first half of the Senior year covering the source, characteristics, physiological action, and therapeutics of each of the electrical currents used in medicine.

**Course II. Roentgenology.** Lectures and demonstrations during the last half of the Senior year deal with the X-ray

tube, the transformers, and accessories in their relation to practical radiography. Radium and Light will be included in the consideration of radiotherapy. The class will have access to a complete X-ray laboratory, having a 16-inch Ruhmkorff coil. The apparatus for the Oudin, D'Arsonval, and Tesla high-frequency currents, together with the usual wall-plate equipment, will also be available for demonstration throughout the year.

Prof. Soiland .....36 hours

#### (f) MEDICAL JURISPRUDENCE

Lectures are given on the following subjects: The legal relations of physician to patient and patient to physician, including rights to compensation, collection of fees, and malpractice; the legal relations of physician to government, including government regulation of practice, power to protect public health, nuisances and their abatement, the adulteration of foods; elementary general principles of law, knowledge of which is frequently required by physicians, including wills, estates of insane and deceased persons, crimes of violence, rights of children, negligence; the legal aspects of mental disorders and diseases, including testamentary capacity and criminal responsibility of the insane and those addicted to alcoholism and drugs, their legal incompetency to make contracts, their property rights, and the responsibilities of their custodians; personal injuries by violence (a) in civil damage cases, and (b) in criminal cases, including rules of evidence, medico-legal inspection, and autopsies (a) to ascertain cause of death, and (b) to obtain evidence of manner of infliction; suicide; toxicology, sex perversions, pregnancy, disease and divorce; life and accident insurance; and expert and opinion evidence, including the medical witness, his position, rights, and duties.

Efforts will be made in this department to familiarize students with the proper methods of practice and procedure in all matters wherein the practitioner of medicine is likely to come in contact with the law or the government, and especially in that large class of cases where accurate knowledge



of legal requirements is called for upon the instant. The lack of such knowledge frequently has caused great embarrassment both to the courts and to the medical profession.

George L. Greer, Attorney-at-Law.....36 hours

### **(g) HISTORY OF MEDICINE AND MEDICAL BIBLIOGRAPHY**

**Dr. P. C. Remondino** will deliver, during the session of 1915-'16, a series of lectures to the entire student body upon the History of Medicine and Medical Bibliography. Dr. Remondino has been selected to present this course, as his finished scholarly attainments, and his inherent ability, together with his broad and comprehensive knowledge of this subject, the results of lifelong study and research, will enable him to make this course particularly interesting and instructive. During the coming year Dr. Remondino will begin his course with a lecture on the medicine of the ancient Accadians, in the course of which he will trace by the similarity of their Shamanic medicine, the ancient race relationship existing between the Laplander of northern Europe and the ancient Tauranian races that once inhabited the plains and mountains of Babylonia. The medicine of the aboriginal American, Oceanic, and African tribes will form the subject of the next lectures, during which the medical practice of the Maya Indians of Yucatan will be traced to its origin in early Egyptian sources. The next lectures will be devoted to the elucidation of the states of Egyptian, Hindoo, and Greek medicine prior to the pre-Hippocratic era. Then will follow the Hippocratic and Alexandrian, the Roman and the Arabian eras, the period of renaissance in Europe in the sixteenth century, and the development of the medical science of the present day.

Dr. Remondino .....6 hours.

### **(h) LIFE INSURANCE EXAMINATION**

A series of lectures will be given to the Junior class on Life Insurance Examination.

Dr. McDonald .....6 hours

**(i) MEDICAL ETHICS AND ECONOMICS**

This College has adopted the recommendation of the Educational Council of the American Medical Association and added to its curriculum a department of Medical Economics. This course will consist of lectures to the Senior class upon the fundamental business principles so essential to the success of the young practitioner, the duties of the medical man to himself, to his confreres, to his patients, and to the public at large, the relation that should exist between the medical man and the druggist, the Church, and the State, etc. This course will aim to inculcate that broad spirit of altruism that should control the relations existing between mankind, and to emphasize the fraternal spirit that should characterize the medical profession.

Professors Bryson and Seymour.....12 hours

**TEXT BOOKS:****Hedecine:**

Practice: Anders; Osler; Tyson; Edwards; Manson; Jackson; Herchfelder.

Diagnosis: Anatomy (for Sophomores); Osler; Butler; Emerson; Anders-Boston; Cabot's "Diseases of the Blood"; Todd's "Manual of Clinical Diagnosis"; Da Costa; C. B. Slade, "Physical Examination and Diagnosis"; Musser.

**Pediatrics:**

Rachford; Rurah; Grulee.

Collateral reading: Rotch; Koplic; Chapin; Jacobi; Kerr; Kerley; Pfaundler and Schlossman; Holt.

**Neurology and Psychiatry:**

Dana; Star; Mettler; "Outlines of Psychiatry," by William A. White; Church and Peterson.

**Dermatology:**

Stelwagon; Pusey; Schamberg.

**Electro-therapeutics:**

Potss, "Electricity, Medical and Surgical"; McIntosh, "Practical Handbooks of Medical Electricity."

**Medical Jurisprudence:**

Draper; Witthaus and Becker, "Forensic Medicine and Toxicology"; Peterson and Haines.

## DIVISION VII. SURGERY AND SURGICAL SPECIALTIES

JAMES HARVEY SEYMOUR, M.D., ORVILLE O. WITHERBEE, M.D., Professors of Surgery and Clinical Surgery  
 CHARLES WILLIAM BRYSON, A.B., M.D., Professor of Abdominal and Clinical Surgery  
 WILLIAM LEANDER ZUILL, M.D., JOHN JOHNSON KYLE, B.S., M.D., Professors of Otology, Laryngology and Rhinology  
 THOMAS JEFFERSON McCOY, M.D., Professor of Ophthalmology  
 CHARLES H. WHITMAN, M.D., Professor of Clinical Surgery  
 FITCH C. E. MATTISON, M.D., W. W. RICHARDSON, M.D., Professors of Surgery  
 GEORGE JESSE LUND, M.D., Associate Professor of Otology, Laryngology, and Rhinology  
 GEORGE WASHINGTON McCOY, A.M., M.D., Associate Professor of Ophthalmology  
 P. C. H. PAHL, M.D., Associate Professor of Orthopedic Surgery, Fractures, and Dislocations  
 WALTER LESLIE HUGGINS, Ph.B., M.D., Assistant Professor of Surgery  
 ANDERS PETERSON, M.D., Lecturer on Genito-Urinal Diseases  
 CHARLES EATON PHILLIPS, A.B., M.D., HARLAN SHOEMAKER, M.D., Lecturers on Surgery  
 CLARENCE H. CRILEY, Ph.B., M.D.; ANDREW P. WILSON, M.D.; FRED E. LETTICE, M.D.; EDWARD SWIFT, M.D.; A. T. CHARLTON, M.D.; C. F. NELSON, M.D.; W. H. GILBERT, M.D.; L. G. AVERY, M.D.; L. L. RIGGIN, Ph.B., M.D.; C. S. YOUNG, M.D.; F. K. COLLINS, M.D., Instructors in Surgery  
 ROSS A. HARRIS, M.D., Instructor in Ophthalmology

### (a) GENERAL SURGERY

The course in this department embraces both didactic and clinical methods and consists of the following:

**Course I.** During the last trimester two hours a week are devoted to Minor Surgery and Bandaging, together with the general principles of anaesthesia. Minor Surgery, in its broadest sense, as taught in the Sophomore year, lays the foundation for the Junior and Senior surgical courses. Anaesthesia is treated both minutely and comprehensively. Two hours per week, last trimester of Sophomore year.

Dr. Avery ..... 24 hours

**Course II.** In the Junior year a thorough course is given in the basic principles of Surgery. This course consists of lectures, recitations, quizzes, ward-walks, close bedside demonstrations and instruction, history-writing, case-taking, the actual participation in the treatment and management of all varieties of surgical conditions, and the postmortem study of various cases that have been under observation in ward and clinic. Clinical material is abundant in all departments and each student in each section in each department receives ample personal, and the very best collective, instruction.

**Didactic:**

Drs. Huggins, Phillips and Shoemaker.....108 hours

**Clinical:**

Drs. Huggins, Shoemaker, Phillips, Criley, Swift,  
Wilson .....96 hours

Total .....204 hours

**Course III. The Treatment of Fractures and Dislocations.**

In this course the didactic and mechanical instruction is supplemented by bedside observation both at the college clinic and in the wards of the County Hospital. Here are shown the latest methods in the treatment of fractures and dislocations, the adjustment of splints, and the application of plaster casts, jackets, and other appliances. Three hours each week during the second trimester, and one hour per week during the third trimester of the Junior year.

Dr. Lettice .....48 hours

**Course IV. Orthopedic Surgery**

Orthopedic Surgery is given throughout the Junior year, and consists of one hour of didactic work each week during the second trimester and one each week during the third trimester, with extensive clinical demonstration, two hours each week, at the County Hospital. This course will include instruction in the application and adjustment of orthopedic apparatus; the theory and practice of the treatment of tubercular bone disease by mechanical means, and by the hygienic-dietetic method; the treatment of scoliosis by gymnastics,

electricity, and massage; the treatment of talipes and flat-foot; the management of infantile paralysis; and practical work in the plaster room as well as operative hospital work.

Dr. Paul (Didactic).....	24 hours
Dr. Phillips (Clinic), each section.....	24 hours
Total .....	48 hours

**Course V.** The course in Senior Surgery is designed to be essentially an operative one, covering the entire range of General Surgery. Three mornings each week from 8 to 10 a. m., in the General Operative Amphitheater at the County Hospital. This clinic is for Senior students, and will not only embrace the surgical technique along with the surgical procedures, but will also include the pre-and post-operative management of each case presented. The Senior students are also working on the college clinic and in the Out-Patient department, and when the student finishes his work here in this school, he has had proper training and his foundation is broad and ample. This clinic course is interspersed with didactic, recitative, and quiz periods, which serves to round out the course in the most adequate manner.

#### **Didactic**

Prof. Seymour .....	72 hours
---------------------	----------

#### **Clinical**

Professors Seymour, Witherbee, Mattison and Richardson (didactic, 192 hours each section.)	
Total .....	264 hours

### **(b) GENITO-URINARY DISEASES**

This course comprises a series of lectures and clinical demonstrations throughout the Senior year, and is limited to Senior students.

In the didactic course, the anatomy, histology, embryology, and physiology of the entire genito-urinary tract is reviewed, such time being spent on this as to insure a thorough knowledge of the fundamental principles of this subject, and then the diseases of the various organs are taken up separately,



special attention being given to the pathological changes and their diagnosis.

The operative procedures are taught on the cadaver, and the students are required to go through the various steps of each operation under the guidance of the instructor.

Special instruction is given in palpation, percussion, and various other methods pertaining to genito-urinary diseases in general, and individual instruction is given in the use of the cystoscope, urethroscope, catheterising ureters, etc.; after which the specific diagnosis of each pathological condition is given in detailed study of its treatment. These lectures are illustrated by a series of clinical demonstrations upon material from the College Clinic and at the County Hospital.

Dr. Peterson (24 didactic hours, 24 clinic hours, each section). Total .....48 hours

### **(c) PROCTOLOGY**

A department of Proctology has been added under Surgical Specialties. Clinical material is abundant and clinics are conducted at the County Hospital regularly, and will include digital, proctoscopic examinations and operative work, with sufficient didactic and recitative hours to round out the course in this too often neglected surgical specialty.

Dr. Kiger (12 didactic hours, Junior year: 24 clinical hours, Senior year).

### **(d) OTOLOGY, LARYNGOLOGY, AND RHINOLOGY**

The work in this department is so arranged as to give the student the broadest possible acquaintance with the clinical side of these subjects. The class is divided into sections, each section having three hours of clinical work in the College Dispensary in addition to the County Hospital work. The didactic work of the department consists of two lecture hours each week in addition to frequent recitations and reviews. The student has every opportunity to make himself thoroughly familiar with all the practical details of this subject, and his knowledge is frequently tested by both oral and

written reviews. The didactic course includes: First, a careful review of the anatomical details of the Ear, Nose and Throat, and their accessory sinuses. Second, a treatment of the influences of general diseases upon these special organs and of the influence that diseases of these organs exert upon the general condition and health of the patient. Third, methods of examination of these organs and special consideration of the diseases affecting them. Fourth, a careful study of the diseases of the accessory sinuses. Fifth, operations.

Professors Zuill and Kyle and Associate Professor  
Lund (36 didactic hours, 24 clinical hours each  
section). Total .....60 hours

### (e) OPHTHALMOLOGY

This course on diseases of the eye will consist of one didactic hour each week in the Junior year and two clinical hours each week in the Senior year, illustrated by the disease in the patient, and by charts and blackboard drawings. Minor operations are performed before the class at the College Clinic and major ones for them at the County Hospital. Ample material is presented at both places. Practical instruction is given on the eye in general; on the recognition, differentiation, and treatment of both the common and the complicated diseases and injuries; on the principles and practice of refraction; on the uses of the ophthalmoscope; and on the recognition of diseases of the eye as diagnostic of disease in remote organs.

Professor T. J. McCoy and Associate Professor  
George W. McCoy (36 didactic hours, 24 clinic  
hours each section). Total.....60 hours

### TEXT BOOKS:

#### General Surgery:

DaCosta; Wyeth; Lexer-Bevan; Scudder's Treatment of Fractures"; Stimson on "Fractures and Dislocations"; Bryan's "Principles of Surgery."

Operative Surgery: Bryant; Bickham; Treaves; Keen.  
Minor Surgery: Foote.

**Orthopedic Surgery:**

Whitman; Bradford and Lovett; Young; Willard.

**Genito-Urinary Diseases:**

No one textbook is followed in the course, but the students of this branch are recommended to buy various texts for comparing diverse views. Works recommended: Casper; Kreissel; Fynger; Corner; Keyes; White and Martin; Morrow's "System"; Deavers' "Diseases of the Prostate Gland"; and the various texts on Anatomy, Histology, and Embryology used in other departments of the school.

**Otology, Laryngology, and Rhinology:**

The collateral reading advised on this subject are such works as Dr. Braden Kyle, "Diseases of Nose and Throat"; J. J. Kyle, "Diseases of Ear, Nose, and Throat" (3rd edition); Bishop on "Diseases of the Nose, Throat, and Ear"; Bacon on "Otology"; Barnhill-Wales, "Modern Otology"; Packard, "Diseases of the Nose, Throat, and Ear."

**Ophthalmology:**

May; Fox, Jackson; De Schweinitz, or Fuchs.

**DIVISION VIII. OBSTETRICS, GYNECOLOGY, AND  
ABDOMINAL SURGERY**

**CHARLES WILLIAM BRYSON, A.B., M.D.**

Professor of Gynecology and Abdominal and Clinical Surgery

**LYLE GILLET McNEILE, M.D.**

Professor of Obstetrics

**HENRY E. SOUTHWORTH, M.D.**

Associate Professor of Gynecology

**HENRY W. HOWARD, M.D.**

Assistant Professor of Gynecology

**PHIL BOLLER, A.B., M.D.**

Instructor in Gynecology

**W. B. SMITH, M.D.; EDGAR M. ALLEN, M.D.; A. A. BLATHER-  
WICK, M.D.,** Instructors in Obstetrics

**(a) OBSTETRICS**

**Course I. Junior Diractic Obstetrics.** Instruction in Obstetrics is begun in the third year, and is carried on by means of didactic lectures, recitations, and demonstrations upon the

manikin and living subject, and by the use of charts, wet and dry specimens, models, and pelves. The subject matter during this year embraces the anatomy of the pelvis; the physiology and development of the ovum, normal pregnancy, normal labor, and normal puerpery.

Three hours a week, during the first and second trimesters, and four hours each week during the third trimester of the Junior year. One hours each week at Los Angeles County Hospital.

Prof. McNeile .....	36 hours
Dr. Allen .....	84 hours
Total .....	120 hours

**Course II. Senior Didactic Obstetrics.** Lectures and recitations are continued during the fourth year, at which time the complications and difficulties liable to be encountered in the practice of the science and art of obstetrics are successively considered, viz., abnormal pregnancy, dystocia, and abnormal puerpery. Special attention is given to asepsis, external palpation, pelvimetry, the use of forceps, and the different obstetric operations.

Prof McNeile .....	72 hours
--------------------	----------

### **Course III. Senior Clinical Obstetrics:**

Students during their fourth year, in addition to the above, are expected to attend six to ten cases of labor, under the supervision of the Professor of Obstetrics. The maternity wards of the County Hospital and the many charitable cases coming under the care of this department afford ample material for practical demonstration.

## **(b) GYNECOLOGY AND ABDOMINAL SURGERY**

**Course I. Junior Gynecology.** This course is given to the Junior Class in the amphitheatre, college, and hospital clinics, and consists of lectures; recitations; manikin, chart, and drawing demonstrations; section clinics at the Homer Toberman (Seventh Street) Clinic; and bedside and ward clinics at the County Hospital. The members of the Junior Class are

divided into sections, under competent instructors, and are required to write histories, examine patients, suggest diagnosis, treatment, and management in individual cases, go over again the anatomy and physiology of the female generative plexus, repeatedly review the etiology of the diseases they see, and thus lay the foundation of Gynecology broadly and well. This course prepares the student for courses given in the Senior year.

Associate Professor Southworth (36 didactic hours,  
24 clinic hours each section). Total.....60 hours

## **Course II. Senior Clinical Gynecology and Abdominal Surgery.**

Instruction in this department is didactic, recitative, and clinical, comprising lectures, recitations, quizzes, dispensary and hospital clinics, and minor and major operations. It continues throughout the Senior year. This course at the County Hospital is essentially an operative course, two hours each week being spent in the Surgical Operating Amphitheatre, where the entire class witness and have explained to them minutely the different methods, as well as the post-operative care of patients. Students are divided into small classes, the better to enable them to witness closely the technique of examinations and manipulations.

Prof. Bryson .....72 hours

**Course III.** While in the clinics at the College Dispensary, students are required to examine, diagnosos, and treat patients in the presence of the professor in charge. The student is thus brought into close personal relation with a large number and variety of cases, and is also enabled to assist at all of the minor and major operations in gynecology and abdominal surgery. Diseases of the bladder and urethra are thoroughly covered in this department and their medical and surgical treatment outlined and demonstrated. Methods of inspection and examination are taught by the use of charts and manikins, as well as demonstrated upon the living subjects.



The practical manipulation of the cystoscope is shown first upon bladder phantoms, then upon the living subject in the Clinical Department. A thorough theoretical as well as practical knowledge of gynecology and abdominal surgery in its broadest scope is a prerequisite to graduation from this College, and every opportunity is offered the student to prepare himself for the arduous duties that will come to him in his professional career.

**COURSE IV.** In order to complete this course, two hours each week is devoted to lectures in the College Amphitheater to the Senior class upon the more fundamental subjects embraced in this department. This course is illustrated by charts, drawings, models, and projectoscope, and details, measures and methods that cannot, for lack of time, be given in the major operations in the Clinic Operating Amphitheatre.

Professor Bryson .....	72 hours
Total Senior Course:	
Didactic .....	72 hours
Clinical .....	72 hours
<hr/>	
Total .....	144 hours

## TEXTBOOKS:

### Obstetrics:

Williams; Edgar; American Textbook; Hirst; Wright; Davis.

### Gynecology and Abdominal Surgery:

Ashton; Gilliam; Montgomery; Reed; Penrose; Hirst; Byford; Crossen; Kelly's "Operative Gynecology"; "Surgical Diseases of the Abdomen," by Douglas; "Abdominal Operations," by Monynihan.

# THE COLLEGE OF LAW

## FOREWORD

The prospective law student should appreciate that his efficiency as a student depends, to a large extent, upon his preliminary education; his success as a lawyer, upon systematic legal training. Instruction obtained from experienced teachers of law will result not only in more thorough, but in more speedy preparation than the more desultory reading in a lawyer's office. The most noteworthy feature in the progress of legal education in the United States has been the growth of law schools, both in number and in efficiency. Familiarity with the routine work of a lawyer's office is of value to the prospective lawyer, but should be preceded by thorough training in the principles of law. The course of study covered by the law school embraces the entire field of law, and is designed to develop the student and fit him for the active duties of a practicing lawyer.

## Association of American Law Schools

The College of Law, University of Southern California, is a member of the Association of American Law Schools.

## Admission to the Bar

Upon graduation from the College of Law, University of Southern California, the student is granted the degree of Juris Doctor (J.D.) or Bachelor of Laws (LL.B.), and is admitted to the bar upon motion, without examination.

## ADVANTAGES OF LOCATION

The home of the College of Law of the University of Southern California is ideally located, both for the purpose of securing the highest class of instructors and for the convenience and training of the students. It is in the center of hundreds of law offices and close to the courts. The

practice of many members of our staff of instruction is such that if teaching should require them to give up the practice of law, no school could pay salaries sufficient to secure their services. To the student of law the Law Library and the lawyer's office are what the laboratory is to the medical student. Many of our Seniors and some of the members of the Freshman and Junior Classes do work in law offices, or at least have office and library privileges.

The quarters in the Tajo building, corner of First street and Broadway, occupy all of the fourth and fifth floors.

### **The Courts**

The Supreme Court of the State holds two sessions each year in Los Angeles, and the students have opportunity to hear carefully prepared arguments by the ablest lawyers of the country, and are required to attend Court not less than ten days each semester.

The United States District Court is held here, and opportunity for study of the Federal practice and procedure is thus offered, on both the law and the equity sides.

The Appellate Court for the Southern District of California holds its session in Los Angeles.

The Superior Court of Los Angeles County, consisting of eighteen departments, is in session the entire year.

Four city Police Courts and four Township Justice's Courts, in which students in the Middle and Senior years can get some actual practice before admission to the bar, are in session daily during the entire year.

### **Library Facilities**

Students are allowed the use of the Los Angeles County Law Library, consisting of thirty thousand (30,000) volumes, upon the same terms as members of the Bar.

The College of Law has a good working library of its own, consisting of State Reports, the Reporter System, and Text and other case books, numbering in all 8,000 volumes.

## EASTERN STUDENTS

To the increasing number of Eastern students spending a few years in Southern California, special opportunity is given for fitting for the practice of law. Those intending to practice in common-law states should notice that an entire semester is devoted to the study of common-law pleading. **It is the aim to fit the graduates of this College to practice law in any state.**

### CONDITIONS OF ADMISSION

**a. Admission to the Freshman Class**—Applicants for admission to the Freshman year must be at least eighteen years of age, and must furnish two certificates of good moral character. Graduates of high schools maintaining a four years' course of study or of other educational institutions whose course is equivalent to such a high-school course, are admitted without examination on the presentation of certificates. Other applicants are required to pass satisfactory examinations in each of the subjects of one of the regular four-year high-school courses.

**b. Special Students.** The Dean may admit as a special student (not candidate for a degree) an applicant of advanced years and business experience, who has not the required entrance qualifications.

**c. Admission to Advanced Standing.** Applicants for admission to the Junior or Senior classes must present certificates of the completion by them of work equivalent to that for which they seek to be credited. Certificates will be accepted when issued by a law school belonging to the Association of American Law Schools, or by other colleges of law whose requirements are as high and whose course is as extensive as that here given. Applicants for advanced standing not having such certificates must pass examination in the subjects for which they seek credit, but any student who desires to take such an examination must first secure permission to do so from the Dean. Such examinations are given only at the beginning of a semester. A charge of five dollars is made for each special examination.

**DEGREES**

The various courses of study lead to the following degrees:

The degree of Master of Laws (LL.M.) may be conferred upon those students who hold the degree of Bachelor of Laws (LL.B.) from this, or an approved institution maintaining a three years' course of study, and who have completed in this department the fourth year of work prescribed by this College of Law.

The degree of Juris Doctor (J. D.) is conferred upon those students who have received the degree of Bachelor of Arts (A.B.) or a substantially equivalent degree in the University of Southern California or in an approved College or University; who have pursued the study of law in this department for three years and completed in full the curriculum prescribed by this College of Law, or who have completed two years in an approved Law School and taken the third year in this College; and who have maintained a standard of scholarship for the three-year course of at least eighty-five per cent. The A.B. degree must have been secured before entering upon the third year of work in the College of Law.

The degree of Bachelor of Laws (LL.B.) is conferred upon students who are graduates of a high school maintaining a four-year course of study, or of another educational institution of equivalent rank, who have pursued the study of law in this College for three years, or in any approved Law School for two years followed by one year in this College, completing in full the course prescribed in this institution; and who have maintained throughout a standard of scholarship of at least seventy-five per cent in every subject.

Credit received in Summer Session will count toward such degrees.

When a student in the College of Liberal Arts has received 94 semester credits (including all prescribed work) and of these has taken not less than 32 in the College of Liberal Arts of the University of Southern California, he may enter



the College of Law, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years in the professional course, and the degree of Juris Doctor upon graduation a year later. For details see under College of Liberal Arts.

## PRE-LEGAL COURSE

It is important that the student be thoroughly prepared before commencing the study of Law. It is therefore recommended that he take the three-year Pre-Legal Course as outlined below in the College of Liberal Arts before entering the College of Law.

### First Year

#### BOTH SEMESTERS

	Units per Semester
English 1 (Composition).....	3
Economics 1 (Principles).....	3
History 1 (English).....	2
A Laboratory Science or Mathematics.....	4 or 5
Foreign Language* .....	5

### Second Year

#### BOTH SEMESTERS

English 30 (English Literature).....	2
Economics 2 and 3 (Money and Banking, Finance).....	3
History 14 (English Constitutional).....	2
Psychology .....	3
Political Science .....	2
Public Speaking .....	2
Foreign Language .....	3

---

\*In cases where Elementary Latin is offered as a college entrance subject, the foreign language may be French or German or Spanish. When not offered as an entrance subject, Latin is prescribed.

## Third Year

Units per  
Semester

## FIRST SEMESTER

Economics 9 (Municipal Problems).....	3
Sociology 2 (Principles).....	3
History 16 (American Government).....	3
Logic .....	3
Ethics .....	2
Debate and Argumentation.....	2

## SECOND SEMESTER

Economics 6 (Labor Problems).....	3
Sociology (Immigration or Criminology).....	2 or 3
History 16 (American Government).....	3
Elective in Philosophy .....	3 or 2
Parties and Governments of Europe.....	3
Debate and Argumentation .....	2

## ATTENDANCE AND SCHOLARSHIP

The Dean calls attention to the privilege of taking four hours of instruction, free, at the College of Liberal Arts. By taking advantage of this privilege, a student may get selected portions of a college course.

A grade of 75%, or over, on examinations and daily work in each subject, is required for promotion or graduation.

In textbook or case courses in which there is a daily quizz, the daily work counts for 60% and the final examination for 40%.

Absences detract from scholarship. Each absence in excess of one in a one period course, two in a two period course, and three in a three period course per semester, will receive a zero mark. If, however, the student files upon return to class an abstract of work done during his absence, the zero mark may be advanced to a maximum grade of 85%, depending upon the merit of the brief. Promotion is not granted in any subject when the attendance falls below 60%.

Persons twenty-one years of age, or over, not studying for a degree, may, by permission of the Dean, enter the College of Law as special students, and may pursue such studies as they desire. This provision is made especially for the aid of those seeking or holding positions of trust in banks and other business institutions.

Any student displaying deficiencies in English diction or usage may at any time be required to take instruction in the class in Expression.

The school reserves the right to expel any student whenever the Board of Control deems it necessary for the welfare of the College of Law, and to suspend any student or use other methods of discipline, whenever such action is deemed advisable by the Dean.

**Special Examinations.** Any student registered for the regular course who desires to take a special examination on any subject must file in the office a petition asking for the privilege and stating his reasons therefor. The petition is referred to the Dean. If the permission is granted, a special examination may be given. Such examination and all examinations for advanced standing are given at the beginning of a semester. Passing grade upon all such examinations is eighty-five per cent.

## THE CURRICULUM

The following courses are grouped under four heads: those of the regular session, those of the night school, those of the graduate course, and certain courses offered in the Summer School.

### I. THE REGULAR SESSION

The purpose of the course is to impart a sound and thorough legal education, and to qualify students for admission to practice in all the courts of this or any other State, and in the Federal Court.

The method of instruction is a combination of the lecture, text-book, and case systems, with practical experience in briefing and pleading. Attention is called to the fact that courses are given in Briefing and the Use of Books. In addition to the briefs required in Practice Court work, the members of the Faculty assign subjects for briefs in connection with their respective classes.

On account of the large number of students enrolled, the classes are divided into several sections. These meet at different times of the day, so that students may select a section to suit their own convenience.

All regular students of the law department are entitled to four hours of instruction per week in the College of Liberal Arts without additional cost.

In addition to the subjects listed in the following schedule, special lectures are provided during the year upon subjects which, though not really required in a legal course, are yet of much value to those desiring a well-rounded knowledge of the law.

The duration of each period specified below is one and one-half hours.

### **First Year**

#### **FIRST SEMESTER**

Contract (Two Periods).....	Clair S. Tappaan
Criminal Law (Two Periods).....	
.....	Paul J. McCormick and Percy V. Hammon
Elementary Law and Blackstone (Three Periods).....	
.....	Gavin W. Craig
Torts (Two Periods).....	Kemper B. Campbell
Bailments (Two Periods).....	Frank M. Porter
Debating (One Period) Beulah Wright, Gertrude Comstock,	
Hugh Neal Wells.	
Practice Court (One Period)	

## SECOND SEMESTER

Contracts, including Quasi Contracts, Partnership, Agency and Guaranty and Suretyship (Three Periods).....	Clair S. Tappaan
Criminal Procedure (Penal Code and Selected Cases) (One Period)..	Paul J. McCormick and Percy V. Hammon
Torts (Two Periods).....	Kemper B. Campbell
Personal Property and Sales (Two Periods)..	Frank M. Potter
Domestic Relations (One Period).....	Vincent Morgan
Debating (One Period)..	Beulah Wright, Gertrude Comstock, and Hugh Neal Wells.
Statutory Interpretation (One Period).....	T. W. Robinson
Patents (One Period).....	F. L. A. Graham
Practice Court (One Period)	

**Special Elementary Law Class.** During January of each year a special class in Elementary Law is conducted, beginning immediately after the holidays and concluding before the second semester starts in February. This course is offered particularly for the new students who expect to enroll for second semester work, and affords them an excellent foundation for the new subjects starting at that time.

## Second Year

## FIRST SEMESTER

Common Law Pleading (Two periods).....	Victor R. McLucas
Private Corporations (One Period).....	Frederick W. Houser
Real Property (Two Periods).....	Kemper B. Campbell
Equity Jurisprudence and Procedure (Two Periods).....	Chas. C. Montgomery
Constitutional Law (Two Periods).....	James S. McKnight
Bills and Notes (Two Periods).....	Clair S. Tappaan
Practice Court (One Period)	



## SECOND SEMESTER

Private Corporations (One Period).....	Frederick W. Houser
Equity Jurisprudence and Procedure (Two Periods).....	
.....	Chas. C. Montgomery
Real Property (Two Periods).....	Kemper B. Campbell
Mining Law (One Period).....	Lewis A. Groff
Wills (Two Periods).....	Victor R. McLucas
Parliamentary Law (One Period).....	Hugh Neal Wells
Research (One Period).....	Wm. Behr
Water Rights and Irrigation Law (One Period).....	
.....	Gavin W. Craig
Practice Court (One Period)	

## Third Year

## FIRST SEMESTER

Code Pleading (Two Periods).....	James G. Scarborough
Evidence (Three Periods).....	Frank M. Porter
Public Corporations (Two Periods).....	Byron C. Hanna
Federal Jurisdiction and Procedure (One Period).....	
.....	Chas. C. Montgomery
Conveyancing (One Period).....	W. S. Allen
Conflict of Laws (Two Periods).....	E. W. Tuttle
Practice Court (One Period)	

## SECOND SEMESTER

Code Pleading (Two Periods).....	James G. Scarborough
Real Property (Two Periods).....	Vincent Morgan
Evidence (Three Periods).....	Frank M. Porter
Damages (One Period).....	Kemper B. Campbell
Insurance (One Period).....	Seward A. Simons
Securities (One Period).....	Gavin W. Craig
Admiralty (One Period).....	E. W. Tuttle
Appeals (Lectures).....	James A. Gibson
Land Titles (Lectures).....	O. R. W. Robinson
Legal Ethics (Lectures).....	Benjamin F. Bledsoe
Bankruptcy (Nine Lectures).....	W. T. Craig
Practice Court (One Period)	

## II. EVENING SESSION

In response to a general demand for night classes in law, an Evening Session was established at the beginning of the year 1908-1909. The night course consists of the same subjects as the day course, but requires four years and three summers for completion. The instructors are the same as those of the Day School. Graduates of the Evening Session receive the degree of Bachelor of Laws (LL.B.), and under the laws of the State of California are admitted to the Bar without examination.

Only three years of the Evening Session are taught each year, the third and fourth years alternating.

### First Year

#### FIRST SEMESTER

Contracts (Two Periods).....	Clair S. Tappaan
Criminal Law (Two Periods).....	Percy V. Hammon
Elementary Law and Blackstone (Three Period).....	
.....	Gavin W. Craig

#### SECOND SEMESTER

Contracts (Three Periods).....	Clair S. Tappaan
Criminal Procedure (One Period).....	Percy V. Hammon
Bailments (Two Periods).....	Frank M. Porter
Personal Property and Sales (Two Periods).....	Frank M. Porter
SUMMER	
Domestic Relations (One Period).....	Vincent Morgan
Patents (One Period).....	F. L. A. Graham

### Second Year

#### FIRST SEMESTER

Torts (Two Periods).....	Kemper B. Campbell
Private Corporations (One Period).....	Frederick W. Houser
Common Law Pleading (Two Periods).....	Victor R. McLucas
Bills and Notes (Two Periods).....	Clair S. Tappaan
Debating (One Period).....	Hugh Neal Wells
Practice Court (One Period)	

## SECOND SEMESTER

Torts (Two Periods).....	Kemper B. Campbell
Parliamentary Law (One Period).....	Hugh Neal Wells
Mining Law (One Period).....	Lewis A. Groff
Private Corporations (One Period).....	Frederick W. Houser
Research (One Period).....	Wm. Behr
Bankruptcy (Nine Lectures).....	W. T. Craig
Debating (One Period).....	Hugh Neal Wells
Practice Court (One Period)	

## SUMMER

Statutory Interpretation (One Period).....	T. W. Robinson
Damages (One Period).....	Kemper B. Campbell
Insurance (One Period).....	Seward A. Simons

**Third Year**

(Offered 1916-1917)

## FIRST SEMESTER

Evidence (Three Periods).....	Frank M. Porter
Conflict of Laws (Two Periods).....	E. W. Tuttle
Equity Jurisprudence and Procedure (Two Periods).....	
.....	Chas C. Montgomery
Practice Court (One Period)	

## SECOND SEMESTER

Evidence (Three Periods).....	Frank M. Porter
Equity Jurisprudence and Procedure (Two Periods)....	
.....	Chas. C. Montgomery
Water Rights (One Period).....	Gavin W. Craig
Admiralty (One Period).....	E. W. Tuttle
Practice Court (One Period)	

## SUMMER

Federal Jurisdiction and Procedure (One Period).....	
.....	Chas. C. Montgomery
Securities (One Period).....	Gavin W. Craig
Conveyancing (One Period).....	W. S. Allen

**Fourth Year**  
(Offered 1917-1918)

FIRST SEMESTER

Code Pleading (Two Periods).....	Vincent Morgan
Junior Real Property (Two Periods).....	Kemper B. Campbell
Constitutional Law (Two Periods).....	James S. McKnight
Public Corporations (Two Periods).....	Byron C. Hanna
Practice Court (One Period)	

SECOND SEMESTER

Code Pleading (Two Periods).....	Vincent Morgan
Junior Real Property (Two Periods).....	Kemper B. Campbell
Senior Real Property (Two Periods).....	Vincent Morgan
Wills and Probate Law (Two Periods).....	Victor R. McLucas
Legal Ethics (Lectures).....	Benjamin F. Bledsoe
Appeals (Lectures).....	James A. Gibson
Land Titles (Lectures).....	O. R. W. Robinson
Practice Court (One Period)	

# FIRST SEMESTER SCHEDULE, 1915-1916, DAY SCHOOL

Instruction beginning September 16, 1915

Freshman, Sec. I.	Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	8:00 A. M.	Ele. Law	Bailments	Ele. Law	Bailments	Ele. Law	Crim. Law
Freshman, Sec. II.	5:15 P. M.	Contracts	Torts	Contracts	Crim. Law	Torts	
	7:00 P. M.		Prac. Court			Sec. I. Debating	
	8:00 A. M.	Sec. II, Debating					
Junior, Sec. I.	8:45 A. M.		Ele. Law		Ele. Law		Ele. Law
	10:15 A. M.	Bailments	Torts	Bailments		Torts	
	12:15 P. M.	Crim. Law	Sec. III, Debating	Contracts	Crim. Law	Contracts	
Junior, Sec. II.				Sec. IV, Debating			
	7:00 P. M.		Prac. Court				
	8:00 A. M.	Bills & Notes	Real Prop.	Pri. Corps.	Bills & Notes	Real Prop.	Const. Law
Senior, Sec. I.	5:15 P. M.	Eq. Jur.	Com. Law Pl.	Eq. Jur.	Const. Law	Com. Law Pl.	
	7:00 P. M.		Prac. Court				Const. Law
	9:15 A. M.						
Senior, Sec. II.	10:15 A. M.	Com. Law Pl.	Bills & Notes	Eq. Jur.	Const. Law	Com. Law Pl.	
	12:15 P. M.	Eq. Jur.	Real Prop.	Pri. Corps.	Bills & Notes	Real Prop.	
	7:00 P. M.		Prac. Court				
Senior, Sec. I.	8:00 A. M.	Evidence	Conf. of Laws	Evidence	Fed. Jur. & Pro	Evidence	Conf. of Laws
	5:15 P. M.	Code Pl.	Pub. Corps.	Conveyancing	Pub. Corps.	Code Pl.	
	7:00 P. M.		Prac. Court				
Senior, Sec. II.	8:00 A. M.		Conf. of Laws		Fed. Jur. & Pro.		Conf. of Laws
	12:15 P. M.	Evidence		Evidence		Evidence	
	5:15 P. M.	Code Pl.	Pub. Corps.	Conveyancing	Pub. Corps.	Code Pl.	
Senior, Sec. II.	7:00 P. M.		Prac. Court				



# **FIRST SEMESTER SCHEDULE, 1915-1916** **NIGHT SCHOOL**

First Year	Hour	Monday	Tuesday	Wednesday	Thursday	Friday
Second Year	7:00 P. M.	Contracts		Ele. Law	Ele. Law	Crim. Law
	8:15 P. M.	Contracts		Ele. Law		Crim. Law
	7:00 P. M.	Com. Law Pl.	Prac. Court	Bills & Notes	Pri. Corps.	Torts
	8:15 P. M.	Com. Law Pl.	Prac. Court	Bills & Notes	Debating	Torts
Third Year	7:00 P. M.	Evidence	Prac. Court	Conf. of Laws	Evidence	Eq. Jur.
	8:15 P. M.	Evidence	Prac. Court	Conf. of Laws		Eq. Jur.
Fourth Year	7:00 P. M.	Const. Law	Prac. Court	Pub. Corps.	Junior Real Prop.	Code Pl.
	8:15 P. M.	Const. Law	Prac. Court	Pub. Corps.	Junior Real Prop.	Code Pl.

Third Year will be given in 1916-1917.

Fourth Year will be given in 1917-1918.

# SECOND SEMESTER SCHEDULE, 1915-1916, DAY SCHOOL

Instruction beginning February 2, 1916

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Freshman, Sec. I.	8:00 A. M. Stat. Int.	Pers. Prop. & Sales.	Crim. Pro.	Pers. Prop. & Sales	Dom. Rel.	Patents
	5:15 P. M. Contracts	Torts	Contracts	Contracts	Torts	
	7:00 P. M.	Prac. Court			Sec. I. Debating	
	5:15 P. M. Ele. Law		Ele. Law		Ele. Law	
Freshman, Sec. II.	9:15 A. M.					Patents
	10:15 A. M. Pers. Prop. & Sales	Torts	Dom. Rel.	Pers. Prop. & Sales	Torts	
	12:15 P. M. Stat. Int.	Contracts	Contracts	Crim. Pro.	Contracts	
	5:15 P. M.		Sec. IV, Debating			
	1:30 P. M. Sec. II. Debating			Sec. III Debating		
Junior, Sec. I	7:00 P. M.	Prac. Court				Water Rts.
	8:00 A. M. Wills	Real. Prop.	Pri. Corps.	Wills	Real Prop.	
	5:15 P. M. Eq. Jur.	Parl. Law	Eq. Jur.	Mining Law	Research	
	7:00 P. M.	Prac. Court				
Junior, Sec. II.	9:15 A. M.					Water Rts.
	10:15 A. M. Wills	Parl. Law	Eq. Jur.	Wills	Mining Law	
	12:15 P. M. Eq. Jur.	Real Prop.	Pri. Corps.	Research	Real Prop.	
	7:00 P. M.	Prac. Court				
Senior, Sec. I.	8:00 A. M. Evidence	Insurance	Evidence	Securities	Evidence	Admiralty
	5:15 P. M. Code Pl.	Real Prop.	Damages	Real Prop.	Code Pl.	
	7:00 P. M.	Prac. Court	Bankruptcy			
	12:15 P. M. Evidence		Evidence	Securities	Evidence	

# SECOND SEMESTER SCHEDULE, 1915-1916 NIGHT SCHOOL

First Year	Hour	Monday	Tuesday	Wednesday	Thursday	Friday
	7:00 P. M.	Contracts	Contracts	Bailments	Crim. Pro.	Pers. Prop. & Sales
	8:15 P. M.	Contracts		Bailments		Pers. Prop. & Sales
Second Year	7:00 P. M.	Mining Law	Prac. Court	Bankruptcy	Pri. Corps.	Torts
	8:15 P. M.	Parl. Law	Prac. Court	Research	Debating	Torts
Third Year	7:00 P. M.	Evidence	Prac. Court	Admiralty	Evidence	Eq. Jur.
	8:15 P. M.	Evidence	Prac. Court	Water Rts.		Eq. Jur.
Fourth Year	7:00 P. M.	S. Real Prop.	Prac. Court	Wills	Junior Real Prop.	Code Pl.
	8:15 P. M.	S. Real Prop.	Prac. Court	Wills	Junior Real Prop.	Code Pl.

Third year will be given in 1916-1917.

Fourth Year will be given in 1917-1918.

### III. THE GRADUATE COURSE

A graduate course of one year is given. Upon those who have previously received the degree of Bachelor of Laws (LL.B.) from this or any Law School that is a member of the Association of American Law Schools or from any other approved Law School maintaining a three-year undergraduate course, the degree of Master of Laws (LL.M.) may be conferred upon the completion of an approved course of graduate study equivalent to ten yearly periods.

The following is the course of study leading to the degree of Master of Laws (LL.M.):

International Law (One Period).....	William Hazlett
Spanish and Mexican Land and Mining Law (Twelve Lectures).....	Warren E. Lloyd
Interstate Commerce (Twelve Lectures).....	E. W. Camp
Codification (Twelve Lectures).....	William W. Phelps
Extraordinary and Provisional Remedies (Sixteen Lectures).....	Curtis D. Wilbur
Public Officers (Ten Lectures).....	Walter F. Haas
Logic (One Period).....	Thomas A. Berkebile
Fraternal Insurance (Six Lectures).....	Carlos S. Hardy
Trusts and Monopolies (One Period).....	Arthur P. Will
American Diplomacy (One Period).....	Arthur P. Will
Medical Jurisprudence (Ten Lectures).....	Carlos S. Hardy
Civil Law (Ten Lectures).....	Thomas A. Berkebile
Philosophy of Law.....	Warren E. Lloyd
History of Jurisprudence (One Period).....	Lewis A. Groff
History of Criminal Law (Fourteen Lectures).....	Tanna Alex
California Codes (One Period).....	Byron C. Hanna
Comparative Constitutional Law.....	Thomas A. Berkebile

A thesis of not less than five thousand words is required upon graduation, the subject to be approved by the Dean.

### IV. THE SUMMER SCHOOL

The Summer Session of the College of Law affords to those who expect to earn a part, or all, of their expenses while going through school, an opportunity to lessen the amount of

study required for the following year. In addition, it furnishes an opportunity for those who have failed in any subject to make it up, and it also provides a way for those who are irregular, because of having taken a part of their course in some other Law School or for any other reason, to make up back work.

The Summer School lasts about nine weeks, and is conducted by the regular teachers.

The Summer Session of the current year begins June 12, 1916. The following subjects will be taught, reciting five days per week.

The first and second series of the Night School will be taught at the same time.

### DAY SCHOOL

**Freshman:** Criminal Law (\$10.00), 5:15 p.m.

**Junior:** Common Law Pleading (\$10.00), 5:15 p.m.

**Senior:** Public Corporations (\$10.00), 5:15 p.m.

### NIGHT SCHOOL

**First Series:** Domestic Relations (\$6.00), 7:00 p.m., followed by Patents (\$6.00), 7:00 p.m., followed by Statutory Interpretation (\$6.00), 7:00 p.m., followed by Insurance (\$6.00), 7:00 p.m.

**Second Series:** Damages (\$6.00), 7:00 p.m., followed by Federal Jurisdiction and Procedure (\$6.00), 7:00 p.m., followed by Conveyancing (\$6.00), 7:00 p.m., followed by Securities (\$6.00), 7:00 p.m.

### THE PRACTICE COURT

Members of the second and third year classes are assigned not less than two cases during each semester, which they are required to conduct through the Superior Court, and two of which must be taken upon appeal through the Appellate or Supreme Courts. Controversies are arranged and assigned upon statements of facts for trial.



All of the steps incident to a contested trial are taken, including preparation of pleadings, argument or motions, and demurrers; preparation of briefs, including trial brief of law and facts; taking of depositions; impaneling of jury; challenges; introductions of evidence; argument of cases; etc.

Students of the first and second years act as witnesses, clients, and jurors. These trials are presided over by a member of the faculty, and are conducted as nearly as possible in the same manner as trials in actual courts. Each student in the first and second years must write at least three briefs, which are examined and graded by the Judge of the Practice Court.

The Practice Courts consist of the Justice's Court, the Superior Court, the Court of Appeal, and the Supreme Court. The procedure conforms to that of the State of California, with pleadings under the code. Sessions of the Courts are held weekly. A student acts as clerk of the Practice Court, and is at the Law School throughout the day. Tuesday evening of each week is set apart for Practice Court. On each Tuesday evening twelve departments are in session.

### ARGUMENTATION AND DEBATING

A course in Argumentation and Debating, Public Speaking and the Technique of Speech, in both class and individual instruction, is offered by Miss Beulah Wright, Dean of the College of Oratory, University of Southern California.

The course in **Argumentation and Debating** is designed to meet the needs of the students of the Department of Law. The work is of the most practical character.

. . . "These, then, are the problems we have to consider: the use of the universal laws of reasoning, the development of the habit of analysis and of unprejudiced methods of investigation, the secret of clear and rapid expression of intellectual processes, and the art of adapting one's material to his hearers so as to win their favor and affect their conduct."

In **Public Speaking**, most of the work is of an extemporaneous nature, such as short talks on current public questions, speech analysis, as well as enlargement of vocabulary, and

the correction of mannerisms, and wrong habits of speech. Attention is also given to the study and delivery of great orations, and to the preparation of original orations.

Students doing work in these classes may receive credit in the College of Oratory to apply upon either of the regular courses.

### INTER-COLLEGIATE DEBATE

Inter-collegiate debating is considered apt training for actual practice at the Bar. Preparation for inter-collegiate debate proceeds upon lines similar to those followed in training for inter-collegiate athletic contests.

The "Final Squad" is selected by means of a Try-Out Debate, held in the early part of January of each year, and the coach selects the intercollegiate teams from the "Final Squad".

Students desiring to enter the Try-Outs are required to attend a squad class for preliminary training, or to show college training equivalent thereto, and satisfactory to the Oratorical Committee. The preliminary squad class continues throughout the first semester, and is open to all students free of charge. Students desiring to enter the Try-Outs, who do not enter the preliminary squad class must file a written application with the Oratorical Committee, together with a statement of previous debating experience.

First year men are eligible to inter-collegiate debate, but debates are arranged each year between smaller colleges and first year men.

The subject for the try-out debates for the year 1914-1915 was: "Resolved, that the Recall should be Abolished in the State of California." These debates were held January 7th and 8th, 1915. There were over thirty contestants. Six debates were arranged for the year. The first was held February 26th at Fargo, N. D., it being the second annual debate between the North Dakota Agricultural College and this College of Law. On March 5th a team was sent from Brigham Young University, Provo, Utah, to debate our local college in Los Angeles. Two debates between Whittier College and the

Freshman teams at the College of Law were held March 12th. One of these took place in Whittier, the other in Los Angeles. A team came to Los Angeles from Denver University for a debate on March 24th. A fourth against the University of Oklahoma was held in Los Angeles April 7th.

Those who participate in inter-collegiate debates are eligible to receive the honorary Tau Kappa Alpha degree.

## **STUDENT ASSOCIATIONS**

### **The Debating Clubs**

The Freshman Debating Classes are under the supervision of the College, and attendance at ninety per cent of the meetings is compulsory on all regular students of the Freshmen Class. The Dean of the College of Oratory directs the work.

The Lyceum is a debating club having a restricted membership, and is composed of members of the Junior and Senior Classes.

### **The Oratorical Association**

The Law School Oratorical Association is organized for the purpose of stimulating interest in oratory.

Occidental College, Pomona College, Whittier College and the University of Southern California compose an Oratorical Association. Students of the Law Department are eligible as representatives of the University in the contests.

A cash prize of \$75 is awarded the winner of the local try-out; \$15 is awarded the contestant taking second place; and \$10 is given the one taking third place.

A contest is also held between representatives of the same Colleges, called the Peace Oratorical Contest. A cash prize of \$100 is awarded the winner of the inter-collegiate event.

### **Fraternities and Sororities**

The four legal fraternities, Phi Delta Phi, Delta Chi, Phi Alpha Delta, and Delta Theta Phi have chapters here.

The Phi Delta Delta Legal Sorority, Alpha Chapter, was organized here in November, 1911. Since that time other

Charters have been granted, making it a national organization. This is the only National Legal Sorority in the United States.

No additional Fraternities or Sororities may be organized without permission from the Board of Control.

### THE ALUMNI MEDAL

This prize is an unusually elaborate gold medal, which is presented each year at commencement to that member of the graduating class who shall have maintained the highest general average in scholarship throughout the whole College course. This medal was awarded in 1915 to Charles Elvon Musick.

### ATHLETICS

Regular students of the College of Law take part in all intercollegiate athletic events. The Law School has separate baseball, basketball, football and tennis teams, and during the past year ranked with the best representatives of the other colleges of Southern California.

### FEES AND EXPENSES

Entrance fee( required upon registration).....	\$10.00
Day Session (nine hours or over), per semester.....	45.00
(For less than nine hours a proportionate reduction.)	
Night Session—	
Freshman year (seven hours or over), per semester	25.00
Other years (seven hours or over), per semester.....	30.00
(For less than seven hours a proportionate reduction.)	
Postgraduate course .....	90.00
Diploma fee .....	10.00
Annual student-body assessment (payable on registra-	
tion) .....	5.00
Special January Elementary Law course.....	10.00
Special examinations, each.....	5.00
Change in schedule more than week after semester	
begins .....	1.00

Failure to pay fees when due debars from the classroom.

No refund is made except in case of sickness, and none is made after the middle of a semester.

The prospective student should expect in incidentals, such as athletic meets, debates, oratorical contests, etc., attendance upon some of which may be required, a sum not to exceed \$5.00.

Fees for Class Work, Public Speaking, per semester (2 periods per week).....\$10.00

Fees for Private instruction charged according to length of period.

Students on arriving at Los Angeles can obtain information in regard to rooms and board by calling at the office of the Law School, 416 Tajo Building.

Although the school cannot agree to secure students positions in offices, yet it will assist those who desire to make such arrangements, and it may be here stated that ordinarily no serious difficulty is experienced in finding such opportunities.

Address all communications to

FRANK M. PORTER,  
College of Law, University of Southern California,  
Tajo Building, First and Broadway,  
Los Angeles.



# THE COLLEGE OF DENTISTRY

## THE BOARD OF TRUSTEES

### Term Expires in 1916

Geo. F. Bovard, A.M., D.D., LL.D. Dr. D. Cave  
W. C. Smith, D.D.S.

### Term Expires in 1917

Chas. D. Lockwood, A.B., M.D., F.A.C.S. J. W. Gray, D.D.S.  
James D. McCoy, D.D.S.

### Term Expires in 1918

Chas. M. Benbrook, D.D.S. Garrett Newkirk, M.D.  
Lewis E. Ford, D.D.S.

### Officers of the Board

Chas. D. Lockwood.....	President
Garrett Newkirk.....	Vice-President
James D. McCoy.....	Secretary
J. Walter Gray.....	Treasurer

### Executive Committee

L. E. Ford	James D. McCoy	Chas. M. Benbrook
------------	----------------	-------------------

### Educational Committee

L. E. Ford	Chas. D. Lockwood	Garrett Newkirk
------------	-------------------	-----------------

## GENERAL STATEMENT

The College of Dentistry of the University of Southern California was organized and formally opened for students eighteen years ago. It is under the control of a Board of Directors and is incorporated strictly as an educational institution without stock, dividends, or profit. The income from

whatever source, is expended for instruction and new equipment, which must make for the best educational results.

The Board of Control is composed of members of the Dental Faculty, and representatives of the Southern California Dental Association, the Los Angeles County Dental Society, the Alumni of the College, and the Trustees of the University of Southern California.

As a member of the National Association of Dental Faculties, and the Institute of Dental Teachers, the College of Dentistry has consistently co-operated with these boards to help place Dentistry upon the high plane it deserves.

The diploma of this College is recognized by all State Boards of Dental Examiners, subject only to such restrictions as govern all dental diplomas in the State in which application to practice is made.

A free clinic for poor school children is maintained in Los Angeles. Free clinics are maintained for the indigent poor, exhibits are located at places of advantage, and public lectures to parents and children are greatly in demand. All these active demonstrations make for better oral hygienic conditions and will mean greater demand for dental service, especially service of a high order.

This college requires three years of thirty-two weeks each to complete the course, which has been adapted to prepare students thoroughly for the practice of dentistry. The technical work is largely performed in the first two years, but a part of the second and all of the third year is given over almost exclusively, outside of the lecture hours, to performing operations in the infirmary, which is open from nine a. m. until five. This affords an unusual opportunity for the developing of skill in general procedures, and clinical material is so abundant that each student can become familiar with all the various diseases of the teeth and of all the structures of the oral cavity and with their treatment.

### **Environment**

The advantages that accrue to the student from a University located in a metropolitan center such as Los Angeles have already been dwelt upon at some length. In addition

to these it may be noted that not only does the varied and cosmopolitan population of Los Angeles supply an abundance of clinical material, which this College uses to the very best advantage; but the rapid growth in population of this section of the country opens many opportunities for dental practice, thus enabling our graduates to locate themselves advantageously.

There are in the city churches of all creeds and denominations; the Y. M. C. A. has a membership of over 5,000 and extends a cordial welcome to young men who seek the refining influences of this splendid association. The Y. W. C. A., working along the same lines, is ever ready and anxious to serve the young woman. The city has also many clubs, social and political; lodges and societies of all kinds; various places of amusement; and, in fact, all things that serve to relieve the student mind at times from the strain of college work.

### **The Alumni Association**

The Alumni Society of this College is an active and energetic organization, and assists very materially in building up the college spirit and maintaining the good fellowship which prevails in Southern California. The membership is composed of all graduates of the College of Dentistry, University of Southern California, who are legal and ethical practitioners. An annual clinic is held each December, and in addition to the interesting demonstrations and scientific papers, there are many pleasant social features.

The Alumni Association publishes a quarterly magazine known as the "Alumni Bulletin," which is devoted to the interests of the members and their Alma Mater.

### **THE BUILDING**

The new College Building was ready for occupancy at the beginning of the session 1914-1915. It represents the concerted efforts of men who, for many years, have devoted themselves to the cause of dental education, and who, in

consequence, are thoroughly familiar with the material requisites that should be possessed by a structure where every branch of dentistry is taught.

The basement contains a system of lockers, men's retiring room and the heating plant.

The ground floor contains reception room for patients, two examination rooms, the business office of the College, the X-ray Laboratory, demonstrators' retiring room, ladies' retiring room, the Senior Laboratory, the Junior Technique Laboratory and the Operatory.

The second floor contains the Library, the Laboratories of Histology and Pathology, Preparation Room, Lecture Room No. 2, Laboratory of Bacteriology, Dental Surgery Room, Freshman Laboratory, men's retiring room, a system of lockers, etc.

The third floor contains the main Lecture Hall, the Laboratory of Chemistry, the Laboratory of Physiology and Materia Medica, the Laboratory of Anatomy, the Research Room, Teachers' Studies, the Demonstrating Amphitheater.

### **Operatory**

In planning this very important unit of the building such features as proper lighting and ventilation were given the most thoughtful consideration. It is provided with seventy-five modern dental chairs, each chair being supplemented by fountain cuspidor, a revolving bracket, gas and electric connection and surgical instrument table. Two large sterilizers of special design enable the students to sterilize their instruments and appliances after each operation in individual compartments. The Operatory is in charge of a superintendent, all operations being performed under his immediate supervision, or that of any one of his several assistants. The dispensary department of the Operatory supplies all materials needed for the operations in the field of operative or prosthetic dentistry upon presentation of orders checked and signed by any one of the demonstrators in charge. A free towel service makes it possible to impress upon the student the necessity of carrying out all operations under scrupulously

clean surroundings. The Operatory faces the best light under which dental operations should be performed, namely north and east. It is surrounded by broad, high windows which make it possible to obtain all available light at all times of the day. Instruments are stored in a system of lockers adjoining the operative clinic.

The lecture schedule is arranged in such a manner that the students can work with little interruption from nine in the morning until four in the afternoon.

With the exception of legal holidays, the Operatory is open the year round. There is no extra charge for the Summer Clinical Course. While not a requirement, it is advised that the student spend as much time of the vacation period as he possibly can in the actual practice of dentistry in the Operatory. This course is very advantageous to the student, as it enables him to put in four solid months of practical work without any interruption from attending lectures.

## LABORATORIES

**The laboratories** are equipped with the appliances and facilities necessary in order to perform operations in the field of prosthetic dentistry with completeness and ease. Each student is assigned to a prosthetic bench unit in which all prosthetic instruments are kept and at which unit the clinical prosthetic substitutes are constructed. Electric lathes, compressed air, soldering table and every other facility which should be included in a modernly equipped dental laboratory, are provided.

**The Junior Laboratory** adjoins the Senior Laboratory and is equipped with the same facilities. The progressive teaching of prosthetic dentistry renders it advisable that the laboratories in which the requirements of the Seniors and Juniors are made, should be separate, for the purpose of securing the maximum of efficiency from both student and instructor.

**The Freshman Laboratory** is located in the second floor, and here the dental novice is trained in the fundamentals of



prosthetic dentistry as well as in such operations as fall within the scope of operative technics. The unit system of benches has been carried out in this laboratory also, thus permitting each student to do his work in an environment which at once impresses him with the advantages to be derived from performing on a systematic basis the several steps of any operation. During the hours which the student is required to devote to laboratory work, the chiefs of these laboratories, as well as their assistants, are at hand to supervise the efforts of the student to duplicate the prosthetic appliances or operative technique manipulations as demonstrated by the head of the department or his assistants.

**The X-Ray Laboratory**, which adjoins the operative clinic, plays an important part in the diagnosis of obscure conditions in the teeth and jaws. The student is trained in the X-ray technique, and also in the interpretation of radiographs. Whenever possible the diagnosis of pathological cases is supplemented by radiographic plates, thus giving to the student the advantage of rational methods of diagnosis.

**The Laboratory of Pathology and Histology** is provided with sufficient microscopes to enable each student to study the characteristics of normal and abnormal tissues without interference from his classmates. Adjoining the laboratory the technique room is equipped with the appliances and materials required for the preparation of sections, and of such drawings as are made use of in the effort to bring out diagrammatically the conditions observed with the aid of the microscope. The laboratory is equipped with Bausch and Lomb microscopes, projectoscopes and other necessary apparatus.

**The Laboratory of Physiology** is equipped with a sufficient number of such instruments as are made use of for demonstration of the didactic work.

**The Laboratory of Materia Medica** is equipped with all crude drugs and preparations which are employed in the treatment of diseases of the mouth and teeth, and for the preparation of dentifrices. Here the student is made to

familiarize himself with the physical, chemical and physiological properties of the medicinal agents used in dentistry, as well as with the methods of dispensing them.

**The Anatomic Laboratories** are located in the third floor and are composed of two halls, in which good lighting and ample ventilation are salient features. **Dissecting material** is plentiful and the Freshmen and Junior students are herein taught anatomy in a practical way and by methods conducive to the maximum degree of efficiency.

All extractions and such operations as fall within the scope of dental surgery are performed in an operating room so fitted as to fulfil every requirement of the aseptic conception of surgery. Instrument and dressing sterilizers, instrument cabinets, electric engines and all other instrumental facilities for the performance of operations in the field of minor surgery are contained in this unit of the building. The surgical room is in charge of instructors, and while the more difficult operations are performed by them, the student is continuously encouraged to undertake individually, under proper supervision, such operations as frequently confront the practitioner, and which by virtue of his lack of collegiate training along this line, he is frequently compelled to refer to a specialist in these branches.

The Library and the Museum are located in a separate room on the third floor. The library is completely supplied with the modern books of reference on dental subjects as well as the leading periodicals. The museum includes a large number of specimens of pathologic conditions as well as of congenital malformations of the teeth and jaws of higher and lower vertebrates.

All members and friends of the profession are invited to contribute books, pamphlets, journals, charts, or interesting specimens, such as casts of deformities or irregularities of the teeth and associated parts, or anything that will be useful and instructive. These contributions will be placed in the library and museum, and marked with the names of the donos.

**CONDITIONS OF ADMISSION****Code of Rules of the National Association of Dental Faculties****Rule 1. Regulating Admission of Students—Preliminary Examination.**

Each student seeking admission to any college of this Association shall have completed an accredited four years' high school course, or shall successfully pass an examination the equivalent of such high school course.

This examination and verification of all certificates shall be conducted by a state superintendent of public instruction or his appointee.

Sufficient knowledge of the English language for the easy comprehension of lectures and didactic instruction shall in every instance be demanded of foreign students in American dental schools.

In event of a student not having completed his full high school course, or of his having done special work in high school, college or academy, or in event of an applicant not being able to furnish satisfactory evidence of having completed a course of study necessary to acquire the required number of points, he may be examined by the Registrar of the College of Liberal Arts of the University of Southern California.

**Admission to Advanced Grades on Certificates**

This College will receive into the advanced grades of Junior and Senior year only such students as hold certificates of having passed examinations in the studies of the Freshman or Junior year grades respectively in a school which demands the same or higher preliminary educational requirements, and maintains the same curriculum; except a student presenting satisfactory evidence of graduation from a reputable medical college, who may then be received into the Junior year, provided he make up such subjects taught in the Freshman year as he has not previously studied.

All students who have successfully passed their examinations for advanced standing and have complied with all the rules of the College of Dentistry shall have their certificates

given or mailed to them within thirty days after such examinations shall have been completed, such certificates to be pledges to any college to which the holders may apply, that the requisite number of terms have been spent in the College of Dentistry, University of Southern California.

### **Special Students**

Special students may be admitted on such entrance requirements as the Faculty may determine.

They will be required to attend courses they desire to pursue with the same regularity as the regular students and will pay the regular tuition fee; no diploma or certificate shall be issued at the close of such special study.

Applicants desiring to register as special students will be required to indicate what subjects they desire to pursue, and to present satisfactory credentials for matriculation in said subjects.

Candidates for admission will not be permitted to matriculate for any session other than that immediately succeeding the date of matriculation.

This College reserves the right to refuse admission to any student or to terminate the attendance of any student, at any time, for what may appear to the Faculty to be good and sufficient cause, as inefficiency, conduct unbecoming a gentleman, or conduct not conducive to the morals of the class or institution; also, to refuse a student the privilege of any special or final examination, for causes as above stated.

## **The Curriculum**

### **Freshman Year**

Osteology: Anatomy, including dissections; Histology, Drawing, Laboratory Work, etc.; Physiology, with laboratory work; Inorganic Chemistry, including laboratory work; Operative, Prosthetic and Crown Bridge Technic; Dental Anatomy; Elementary Materia Medica.

Examinations held at the end of the year are final in Dental Histology, Dental Anatomy and General Histology.

### **Junior Year**

Anatomy, including dissections, and Osteology of the Head; Physiology, including laboratory work; Organic and Physiological Chemistry; Metallurgy with laboratory work; General Pathology; Orthodontia, Didactic and Technic; General and Dental Materia Medica; Children's Teeth, Operative, Prosthetic, Crown and Bridge, Porcelain, Didactic and Technic; Comparative Anatomy; Prosthetic Dentistry; Operative Dentistry; Elementary Dental Pathology.

Examinations held at the close of the first semester, February 1st, are final in Operative, Prosthetic and Crown and Bridge Technic. Examinations held at the end of the year are final in Anatomy, Physiology, Chemistry, Metallurgy, General Pathology, General Materia Medica; and Comparative Anatomy.

### **Senior Year**

Dental Pathology and Therapeutics; Dental Materia Medica; Surgery, general and oral, and extracting; Anesthesia; Orthodontia; Prosthetic Dentistry; Operative Dentistry; Dental Jurisprudence; Dental Porcelain, with Technic work; Radiography; Bacteriology; Children's Teeth; Ethics and Hygiene.

### **Text-books**

Students are advised to defer purchasing text-books until they meet the various professors and instructors in the classroom and are instructed definitely as to the books required in the different departments.

## **REQUIREMENTS FOR GRADUATION**

The candidate for the degree of Doctor of Dental Surgery must have attained the age of twenty-one years, and must be of good moral character.

He shall have attended three full courses of lectures, of thirty-two weeks of six days each, exclusive of vacations, at



some recognized and accredited dental school, the last course of which shall have been attended at this school.

He must complete all technic work prescribed throughout the course, perform all operations, treat all cases, insert the required number of artificial dentures, crowns and pieces of bridgework required by the respective professors. All this must be done in the College building, and exclusively by the applicant for the degree. He must have conformed to all the rules of the college and paid all fees. He must pass a satisfactory examination, oral, written, and practical. When these requirements have been complied with he will be recommended to the Board of Trustees for the degree of Doctor of Dental Surgery.

The degree will not be conferred upon a student who is not present in person at the commencement exercises, unless excused by the Dean.

### **Rules Governing Examinations and Standing of Students**

The grades will be made upon the scale of 100; the passing mark will be 75; attendance upon infirmary clinics, 80 per cent; lecture courses and laboratories, 80 per cent.

### **Five Medals Are Competed For**

Forty per cent of the students of each class must compete; otherwise no prize will be given.

1. The Los Angeles County Dental Society Medal is awarded the Senior who has made the best average on theoretical work during the three years' College course.

2. The Cave Medal is awarded to the student making the best piece of Prosthetic Technic work.

3. The Ford Medal is awarded to the student making the best piece of Porcelain Technic work.

4. The La Touche Medal is awarded to the student making the best piece of Operative Technic work.

5. The Eshelman Medal is awarded to the Freshman student who attains the highest average in Technic work throughout the year.

6. The Edgar Palmer prize, consisting of a set of extracting forceps, is given to the student attaining the highest degree of proficiency in extractions.

### **The A. Halden Jones Chemical Prize**

**At Least Six Students Must Compete**

A prize of \$25.00 is offered to the student presenting the best thesis on his choice of certain selected subjects in Chemistry and Metallurgy. These subjects will be announced in the catalogue each year. The thesis must embody the results of some original work on the part of the student. Every assistance will be given those competing for this prize. The resources of the chemical department will be placed at their disposal.

The subjects for year 1915-1916 are the following:

I. Difference in behavior between hydrogen ions and other ions in production of pain in sensitive cavities.

II. The advantages of embodying the oxides of certain metals with zinc oxide in zinc oxyphosphate cement.

III. Possibilities of organic dental cements especially of the casein formaldehyde type and the camphor-nitro-cellulose type.

## **Departments of Instruction**

### **DEPARTMENT OF OPERATIVE DENTISTRY**

A. C. LA TOUCHE, Professor  
T. L. MILLHAM, Demonstrator  
E. C. UNDERHILL, Demonstrator  
C. H. WAKE, Demonstrator  
WARREN D. GILL, Demonstrator  
H. E. CANNON, Demonstrator

The instruction in this department is given in the Junior and Senior years and embraces didactic and clinical teachings. The system of instruction is so arranged that the student after entering into the work of the Senior year is already technically able to carry out under qualified supervision advanced operations in the realm of operative dentistry. The student is trained in all the advanced methods of operative

restorations which after years of trial and experimentation have proven to be the most dependable and efficient. Lectures are delivered to the Seniors and Juniors throughout the year by the head of the department and are supplemented by clinical demonstrations in the Operatory. The student after having completed the operative technical requirements of the Junior and Freshman years is at the beginning of the second semester permitted to undertake clinical work in the Operatory, provided that throughout the period of technical preparation he has obtained such results as in the judgment of his instructors constitute a justifiable warrant for advancement. The histological survey of the tissues of the tooth, from the standpoint of operative dentistry, is given a degree of prominence in harmony with the role which the subject plays in the preparation of cavities upon a foundation which takes into consideration the restorative and prophylactic objects of operative procedures, particular stress being laid by the chair to the restoration of normal tooth contour—the imperative requisite in the maintenance of correct relationship in the interproximal space. The course is graded as follows:

Dental histology with reference to operative dentistry—the treatment of the enamel, of dentine and of cementum. Examination of the teeth and soft tissues of the mouth. Instruments and appliances. Methods of excluding moisture. The principles and technique of cavity preparation for the various filling materials. Detailed study of the physical characteristics of filling materials. The operation of filling cavities with gold foil. The operation of filling cavities with gold inlays. Porcelain inlays. The plastics—amalgam, synthetic porcelain, cement, and gutta-percha. The technique of pulp-capping. The management of patients. The technique of filling root canals. Bleaching of teeth. Management of children's teeth.

Hours—Lecture Work .....	88 hours
Clinical Demanstrations .....	64 hours
Books—Operative Dentistry, Black's Vols. I and II, and American Text-Book of Operative Den- tistry, Kirk.	

**DEPARTMENT OF OPERATIVE TECHNICIS**

**A. C. LA TOUCHE**, Professor  
**J. T. PARKER**, Demonstrator  
**C. H. WAKE**, Demonstrator  
**W. D. GILL**, Demonstrator

It is our aim to make this department one of the strongest in the College. The object of this course is to afford a thorough technical training in operative procedures, preparatory to practical work in the Operatory; to develop manipulative skill and to give the students an intimate knowledge of the tissues upon which they are to operate and of the physical qualities and adaptation of the materials to be used, and to secure facility in the use of instruments by systematized practice upon teeth out of the mouth.

Special attention will be given to the study of pulp chambers and root canals, their number, size, and form, and their relation to the outer surfaces of the teeth. Sections of the natural teeth will be prepared by each student in such a manner that these features will be clearly shown.

The student will construct model tooth forms of natural teeth, upon which operations will be performed as in actual practice. This will consist in the preparation of cavities and a study of their classification and forms; the study of enamel and the direction of cleavage on different parts of the crowns of the several teeth with special reference to the best form and finish of margins of cavities for filling; the cutting of dentine and the various methods employed in anchoring fillings; the removal of various tissue; the management of pits and fissures; and the general shaping of the cavity. Instruction will also be given in the application of the rubber dam, the methods employed in gaining space, the use of clamps, wedges, separators, etc. In conjunction with practice in cavity preparation there will be a study of filling materials and their manipulation. This course is designed to ground the student thoroughly in the principles of filling operations, and to prepare him to prosecute intelligently the practical work of the Operatory.



Hours—Freshmen Technics .....	198 hours
Lecture work .....	64 hours
Junior Technics .....	72 hours
Lecture work .....	24 hours
Books—Operative Dentistry, Black's Vol. II.	

## DEPARTMENT OF PROSTHETIC DENTISTRY

C. J. R. ENGSTROM, Professor  
 E. LESLIE EAMES, Demonstrator  
 FRANK G. STALEY, Demonstrator

Realizing that there is no branch of dentistry in which students are ordinarily so deficient as in the prosthetic department, we have aimed to develop a practical working course to the end that our graduates may be able to do this class of work in a practical and artistic manner.

From an artistic standpoint we teach the higher possibilities of the art of restoring the features of the face, together with the staining and grinding of the teeth to meet the conditions of the individual type of the patient.

The fundamental principles of atmospheric pressure, leverage, etc., are dwelt upon, enabling the student intelligently to meet the conditions presented in difficult cases. Both technical and practical dentures of all kinds are made, such as vulcanite, celluloid, aluminum Watts metal, weighted rubber, gold and porcelain continuous gum. Both practical and technic interdental splints are made for fracture cases, as well as obturators and velums for cleft palate cases. Moreover, as a dentist may be called upon to restore loss of tissue adjacent to the oral cavity, the course includes the making of celluloid ears and noses.

The latest discoveries in the field of prosthesis affecting the construction of full and partial dentures are brought to the attention of the student in order to guide him along channels of rationalism in prosthesis. Methods of impression taken with modeling composition, the articulation of teeth on an anatomic and physiological basis, the selection of teeth from the standpoint of masticatory and artistic efficiency, the construction of removable partial dentures and bridges are prom-



inent divisions in this department of instruction. The course is graded as follows:

Impressions of the Mouth, Old and New Methods. Study of the Physical Characteristics of Impression Materials. Plaster Casts. Metal dies and Counter-dies. Occlusion. Articulation. Full Upper and Lower Dentures. Partial upper and Lower Dentures. Plate Attachments. The Gysi Articulator. Principles Underlying the Vulcanizing of Rubber. Selection of Artificial Teeth. Metal Dentures. Pathologic conditions resulting from the wearing of defective crowns, bridges, vulcanite and metal dentures. Facial prosthesis.

Hours—Freshman Technics .....	384 hours
Lecture work .....	96 hours
Junior Technics .....	192 hours
Lecture work .....	96 hours
Senior lecture work.....	64 hours
Books—American Text-Book of Prosthetic Dentistry, Turner. Dental Prosthetics, Wilson.	

## DEPARTMENT OF CROWN AND BRIDGE WORK

JOHN C. HOPKINS, Professor  
E. LESLIE EAMES, Demonstrator  
FRANK G. STALEY, Demonstrator

Crown and bridge work pertains both to operative and prosthetic dentistry, and yet it occupies such an important field that the College has deemed it wise to make it a separate department.

Students receive a complete course in Crown technique, as well as lectures, during their Freshman year. Juniors receive a complete course in Bridge technique during the first semester and do practical work in the Operatory during the remainder of the year. Seniors perform practical work in the Operatory. The principles of construction of all of the various forms of crowns and bridges at present in use are taught, and a study is made of the stress applied by the muscles of mastication to the teeth, both singly and collectively, with its bearing upon crown and bridge construction, including the

conditions under which bridges should or should not be used. The clinical demands are excellent, requiring porcelain and gold crowns and bridges.

Hours—Crown and Bridge, Freshmen

Technic .....	192 hours
Junior Technic .....	96 hours
Lecture Work, Freshman.....	48 hours
Lecture Work, Juniors.....	30 hours
Lecture Work, Seniors.....	96 hours

Books—Crown and Bridge Work, Evans, also Goslee's and Hovestadts.

## DEPARTMENT OF CERAMIC ART

B. F. ESHELMANN, Professor  
H. C. KING Demonstrator  
MARK KELSEY, Demonstrator  
J. C. HOPKINS, Demonstrator  
CLARENCE E. WORTH, Demonstrator

Porcelain is attracting more and more attention. It is the most artistic method of restoring teeth or parts of teeth. Cavities in the natural teeth can be filled with porcelain inlays, which so accurately imitate nature as to be undetectable to the naked eye.

Students of this school will be expected to attain a high degree of proficiency in the manipulation of porcelain. The College is equipped with Townsend, Hammond, and Custer electric furnaces, and with a large oil furnace for continuous gum work. Students are taught how to construct inlays of high- or low-fusing porcelain, and porcelain crowns and bridges, with special attention to the different blending of colors. A complete course of lectures is given covering the entire subject.

Opportunity is afforded the Seniors and Juniors for making a technical continuous gum case.

Hours—Technic and Clinical Work.....64 hours

**DEPARTMENT OF GENERAL MATERIA MEDICA****GEORGE H. WALKER, Professor**

The work for the Junior class consists in a study of definitions, the use of abbreviations and terminology, the source of drugs, preparations made from crude drugs, methods of administering medicines and agencies, classifications of drugs, their physical, chemical, and poisonous properties, dosage, antidotes, and therapeutic application. Special attention is given to those drugs that are peculiarly valuable in the practice of dentistry, and the course is so planned that the student may receive a practical knowledge of the application of dental medicine in his every-day work. One lecture a week.

In the Senior year the work of the Junior year is carefully reviewed in a systematic way, and thereafter a special course of lectures is given relating to the latest and best approved methods in the application of medicines to the treatment of those pathological conditions of more than usual significance to the dentist. One lecture a week throughout the scholastic year.

Hours .....64 hours

Books—Materia Medica, Pharmacology and Therapeutics, Buckley—also Long and Prinz.

**DEPARTMENT OF PYORRHEA ALVEOLARIS AND ORAL PROPHYLAXIS****MAXWELL M. DIXON, Demonstrator and Lecturer****G. MAURICE CROW, Assistant****D. ARTHUR JOHNSTON, Assistant****J. T. LOUGHAN, Assistant****THOMAS LYNCH, Assistant**

Oral prophylaxis, as well as the treatment of the group of diseases generally designated as pyorrhea alveolaris, is from the clinical standpoint, the subject of attention in a special department. Seniors and Juniors are required to devote one afternoon a week exclusively to this most important phase of dental therapeutics. This department is presided over by specialists in these branches and affords the student an opportunity to familiarize himself in detail with the technique of

the operations in the fields of oral prophylaxis and pyorrhea alveolaris. The course embraces the didactic and clinical consideration of the following phases of the work.

Instrumentation. Correction of conditions which act as predisposing factors in the incidence of diseases of the hard and soft tissues of the tooth and of its supporting structures. Clinical consideration of the varieties of calcific deposits upon the crowns and roots of teeth. Conservation of contour, and septal tissues. Diseases of the gingiva and pericemental membrane of the pyorrhea type. The surgical removal of deposits. Polishing of tooth and root surfaces. Treatment of the teeth of children with the end in view of preventing the onset of dental caries. Splinting of teeth the seat of pericemental disturbances.

Hours—Clinical Work .....96 hours

## DEPARTMENT OF DENTAL ANATOMY

A. C. LA TOUCHE, Professor

J. T. PARKER, Jr., Demonstrator

The student takes up the study of nomenclature, followed by descriptive human dental anatomy, the arrangement of the teeth, and the structure of the root canals. Drawings and the making of cross-sections of the various teeth enter into this course. Lantern slides in large numbers are used to facilitate the study of this important branch of the curriculum. This method will be of material benefit to the student, as the different surfaces of the tooth will be enlarged upon the screen.

Hours—Lecture Work .....32 hours

Laboratory Work .....96 hours

Books—Dental Anatomy, Black—Dental Anatomy  
and Histology, Broomell and Fischelis.

## DEPARTMENT OF ORAL SURGERY

CHAS. D. LOCKWOOD, Professor

D. D. THORNTON, Assistant Professor

C. F. THOLEN, Assistant Professor

R. E. LANE, Dental Surgeon

H. E. STRAUB, Dental Surgeon

This course will consist of:

1. Didactic Lectures by Prof. Lockwood.

2. Text-book quizzes by Dr. Thornton.

3. Clinics at the Los Angeles County Hospital by Prof. Lockwood, assisted by Drs. Thoen, Lane and Straub.

The course in Oral Surgery will be made as practical as possible, special attention being given to diagnosis. The Los Angeles County Hospital furnishes abundant material to demonstrate all surgical lesions of the mouth and weekly clinics are held by Prof. Lockwood and assistants from October 1, 1915, to March 1, 1916.

Hours—Lecture Work .....32 hours

Clinical Work .....96 hours

Books—Surgery and Diseases of Mouth and Jaws,  
Blair—also McCurdy.

## DEPARTMENT OF ORTHODONTIA

JAMES D. McCOY, Professor

JOHN R. McCOY, Assistant Professor

**Course I. Junior Year.** Lectures, illustrated by lantern slides, demonstrations and technique. The principles of Orthodontia are taught, special attention being given to normal occlusion and those factors which maintain it. The etiology of malocclusion in all its phases is thoroughly discussed, followed by the classification, diagnosis and preliminary considerations of treatment. The technique of taking impressions and making models for orthodontic purposes is demonstrated and each student is required to construct certain pieces of technique work.

Hours .....32

**Course II. Senior Year.** Lectures, illustrated by lantern slides, demonstrations and clinical instruction. The work of the Junior year is very briefly reviewed and the principles of treatment continued. The various modern means employed in the correction of malocclusion of the teeth and facial deformities are thoroughly explained and demonstrated. The procedures necessary for the prevention as well as treatment of all phases of malocclusion are covered in detail.

Hours .....32

Books—Malocclusion of the Teeth, Angle.  
Practical Orthodontia, Dewey.



## DEPARTMENT OF RADIOGRAPHY AND THE X-RAY

JAMES D. McCOY Professor  
 A. C. LA TOUCHE, Associate Professor  
 JOHN C. HOPKINS, Clinical Instructor

**Course I. Junior Year.** In a series of illustrated lectures the principles of the X-Ray are thoroughly explained, including its history, the means employed in its production. Modern X-Ray apparatus and the rules governing its manipulation are explained. Its application to dentistry and the technique of dental and oral radiography are brought out in detail.

**Course II. Senior Year.** In the X-Ray room which is equipped with all the necessary modern X-Ray apparatus practical cases from the Operatory are subjected to X-Ray examination. Radiographs of the teeth and associated structures are made whenever indicated. In this way the student becomes familiar with the practical as well as the theoretical side of this important subject.

Hours—Lecture Work .....10 hours  
 Practical Work .....32 hours

## DEPARTMENT OF COMPARATIVE DENTAL ANATOMY

I. D. NOKES, Lecturer

This course involves a comparison of the teeth of man with those of the lower orders of animal life. Evolution, with the part that variation plays in determining the character of a given organ, is studied. The students prepare specimens under the guidance of the teacher. The course is made more interesting and instructive by the large collection of specimens and the complete line of lantern slides that are used for illustrating the lectures.

The course is strengthened and enlarged by the complete equipment and facilities that the new building affords.

Hours—Lecture Work .....16 hours

**DEPARTMENT OF ANAESTHESIA: GENERAL  
AND LOCAL**

**JULIO ENDELMAN**, Professor  
**ROY L. SPENCER**, Lecturer  
**C. J. APABLASA**, Demonstrator

The wonderful development in the field of anaesthesia, which has been brought about in the past three years through the efforts of investigators in the medical and dental professions, constitutes the reason for the establishment of a department exclusively devoted to the study and practice of all methods of inducing general and local insensibility to pain. Infiltration anaesthesia, conductive anaesthesia, intraosseous anaesthesia, nostrous oxid-oxygen anaesthesia, etc., are some of the methods with which the student is made to familiarize invariably under the immediate supervision of a member of the staff.

Hours—Daily clinical demonstrations.

**DEPARTMENT OF ANATOMY**

**W. R. MOLONY**, Professor  
**MELVIN ELLIS**, Associate Professor  
**WAYNE P. HANSON**, Demonstrator  
**EDWIN H. SCHNEIDER**, Demonstrator

**Anatomy I.** In this course the anatomy of the bones, joints, blood vascular system, peripheral nervous system, thorax, abdomen, and their viscera are studied. Special emphasis is laid upon points of practical importance. Lectures, recitations, and demonstrations twice a week, first semester of the Freshman year.

**Anatomy II.** Dissection and demonstrations of at least one part of the cadavar. The student is shown the proper method of making careful and accurate dissections, particular attention being paid to thoroughness and the relation of parts. Twice a week, second semester of the Freshman year.

**Anatomy III.** Lectures twice a week followed by recitations upon the same. Special attention is given to the anatomy most intimately associated with the practice of

Dentistry. Two lectures a week, followed by recitations, first semester of the Junior year.

**Anatomy IV.** Dissection and demonstrations of the head and neck. Two lectures a week, followed by recitations, second semester of the Junior year.

Hours—Lecture .....128 hours

Books—Cunningham,—also Gray and Piersol.

## DEPARTMENT OF PHYSIOLOGY

J. WALTER REEVES, Professor  
JULIUS R. HAMILTON, Lecturer

The courses in Physiology are given during the first and second years. The work consists of a systematic course of lectures, recitations, and demonstrations. This College has a complete Physiological Laboratory equipment.

The subject of cells, tissues, blood, and the circulatory system are first taken up, and later the course is devoted to the study of the alimentary canal, excretory organs, the nervous system, the organs of special sense, and the organs of reproduction.

Bearing in view the fact that the dentist is a specialist in the treatment of diseases in an area of the human body which plays so important a part in the maintenance of the general nutritional balance, the course is so graded as to result at the end of the Junior year in the acquirement by the student of a degree of proficiency which shall enable him thoroughly to understand the functional and nerve mechanisms of all the tissues and organs of the body. The strictest attention to the individual requirements of the student is in this, as in other departments of the curriculum, an object paramount in the efforts of the professor and assistants.

For the purpose of conducting quizzes, oral and written, the class is divided into sections, each section being under the supervision of assistants. This plan likewise applies to the practical work in the laboratory devoted to the purpose, the students performing experimental work under the direct supervision of demonstrators.

**Course I. Freshman Class.** Cells, Tissues. Circulation—Study of the circulating fluids in detail. Heart and Blood Vessels—Lymphatic structures and channels. Respiration—anatomic and physiologic survey of the organic structures, nerve mechanisms and interchange of gases in respiration.

**Course II. Junior Class.** Digestion—Detailed study of the ferments and the glands associated with the alimentary canal. Excretion—Kidneys, skin, etc. Internal Secretion—Pituitary body, thyroid, thymus, spleen and adrenal body. Nervous System—Cerebro—spinal axis, spinal, sympathetic and cranial nerves. Special Senses—Sight, hearing, taste, etc. Reproduction, etc.

Hours .....	192
Books—Kirke's Handbook of Physiology.	
Brubaker's Physiology.	
Hall's Physiology.	

## DEPARTMENT OF CHEMISTRY

A. HALDEN JONES, Professor  
 DONALD K. LIPPENCOTT, Special Lecturer  
 R. F. BELL, Assistant  
 ....., Junior Assistant

### 1. General Chemistry

- a. Lectures, demonstrations and text-books, two weekly.
- b. Laboratory work, six weekly, Oct. 1 to January 1; four weekly, January 1 to May 15.

The general principles of inorganic chemistry are reviewed. Special stress is laid on physical chemistry so that the student may correctly interpret the modern ideas of matter and the properties of matter. Then the study of the elements and their compounds is taken up; first the non-metals, most of them being prepared in the laboratory. In the study of the metals the application of the principles of chemistry and metallurgy to the dental profession is continually borne in mind. Detailed consideration is given to nitrous oxid, hydrogen peroxide and the peroxides of the alkalies and alkaline earths, silica and the silicates, porcelain and glass, the acids

of phosphorous, the chemistry of the powders of oxyphosphate cements and of photography.

## **2. Metallurgy.**

- a. Lectures and demonstrations, two weekly.
- b. Laboratory work, six weekly, October 1 to January 1.

In this course only those metals are considered that are of importance to the dentist. These are studied with reference to their physical and chemical properties; their separation and refining and their identification. Alloys, amalgum alloys, solders, cements, dentifrices, etc., are prepared in the laboratory.

## **3. Qualitative Analysis**

- a. Lectures and demonstrations, two weekly, January 1 to April 1.
- b. Laboratory work, four hours weekly.

The fundamentals of analytical methods, chemical and physical equilibrium, theories of solution and ionization. Some applications of physical and electro-chemistry to qualitative and quantitative analysis. The advantages and simplicity of dry methods in certain cases are studied in detail. The student is given unknown alloys and solutions. In these he is required to determine both metal and acid radical.

## **4. Electro-Analysis**

Two lectures and two laboratory periods weekly for eight weeks.

Discussion of apparatus and methods. Separation and quantitative determination of gold, silver, copper, zinc, and cadmium. Determination of a few anions.

## **5. Sanitary Water Analysis**

A study of the impurities in drinking water, their significance, limits of permissibility and method for their determination.

## **6. Fire Assay**

At least six students must register for this course or it will not be given. Course arranged to suit needs of students applying.



## **7. Minerology**

Six lectures, eighteen hours laboratory.

Descriptive and determinative course. The most important ores of elements used in dentistry are studied.

## **8. Toxicology**

Twelve weeks.

The physiological and toxicological action and the antidotes for the common non-metallic poisons, such as yellow phosphorous, the mineral acids and caustic alkalies, the metallic poisons, the volatile organic and alkaloidal poisons. The application of tests for these substances in body secretions and post mortem material.

## **9. Food Analysis**

Ten weeks.

Apparatus and methods. Detection of adulterants and preservatives.

## **10. Organic Chemistry**

Ultimate and proximate analysis of organic compounds in lecture and demonstration. A theoretical study of the aliphatic, carbocyclic and heterocyclic compounds, and the course is finished by the student preparing several organic compounds in every day use in his profession—such as chloroform, aristol, iodoform, ethyl bromide, etc.

## **11. Physiological Chemistry**

The chemistry of the mouth and salivary digestion in detail. Also chemistry of gastric and intestinal digestion, urinalysis, chemical constituents of the body in general and their action in metabolism.

## **12. Chemical Seminar**

The teaching force of the department will meet with interested students in the evening to discuss recent literature, problems of research, etc. At this time we will hear from teachers in other universities that may be available. This should do much to stimulate interest in research.

### 13. Original Investigation

Students wishing to do work along special lines are encouraged to do so if they have sufficient training and time from their other studies. The resources of the department are placed at their disposal. The possibility of new and better alloys, cements, better oral antiseptics, etc., is suggested.

### 14. History of Chemistry

Ten lectures.

Course No. 1 is required of all Freshmen.

Courses 2, 3, 7, 10, 11 are required of all students before registering for Senior year.

Course No. 4 is given by Donald K. Lippincott every second year. Students of all classes having credits for Course No. 1, or its equivalent, are eligible.

## DEPARTMENT OF DENTAL PATHOLOGY

JULIO ENDELMAN, Professor  
..... Assistant

The instruction in this branch will consist of two lectures each week to the Junior and Senior students, embracing a study of all pathological conditions of interest to the dental practitioner, together with a general application of the therapeutic agents indicated in the treatment of such conditions.

The didactic work is supplemented by clinical work in the College Operatory, under the direct supervision of the professor and his assistant. Every possible deviation from the normal, functionally or organically, is closely observed and the student is made to familiarize himself with every phase of oral and dental pathology. He is daily confronted with problems in dental pathology which he is made to study individually, the results of his observations being submitted to those in charge of this department for final criticism. The study of disease processes and the instituting of rational curative

measures being the keynote of a successful practice, to this department of the curriculum is given the undivided attention of the Chair.

The following are some of the divisions of the course which are entered into at length and in detail. Monthly written tests are a feature of the work:

Anatomic conception of disease—Cellular pathology. Cause of disease, general and local (predisposing causes, exciting causes). Disorders of nutrition affecting the mouth and its contained organs (hypernutrition and hyponutrition). The hyperacid diatheses—The hypoacid diathesis. Malformations of the hard and soft palate. Inflammation in general. Degenerations and infiltrations. Diseases of the jaws. Osteitis (proliferating and rarefying). Osteomalacia. Septicemia. Sepsis. Pyrexia. Macroscopic and microscopic anatomy of the hard and soft tissues of the tooth. Chemistry of fermentation. Dental caries. Developmental defects and diseases of the enamel. Developmental defects and diseases of the dentine. Developmental defects and diseases of the cementum. Diseases of the pericementum. Pyorrhea alveolaris. Pericemental abscess. Chemistry of the decomposition of nitrogenous bodies. Animal alkaloids. Diseases of the pulp. Diseases of the alveolar processes. Diseases of the gums. Neoplasms, malignant and benign. Diseases of the lining of the mouth. Diseases of the tongue. Diseases of the maxillary sinus. Systemic intoxications (organic and functional diseases) traceable to foci of infection in the teeth and jaws. Buccal syphilis. Buccal tuberculosis. Diagnostic significance of local disorders in the supporting tissues of the tooth and lining of the mouth in their bearing upon general intoxication. The uric acid problem.

Hours—Junior Year .....64 hours  
 Senior Year .....64 hours

Reference Books: Pathology of the Hard Tissues of the Teeth, Black; Special Dental Pathology, Black. The American Text-Book of Operative Dentistry, Kirk.

**DEPARTMENT OF CLINICAL DENTISTRY**

LEWIS E. FORD, Professor  
F. G. STALEY, Demonstrator  
G. L. MILLHAM, Demonstrator  
E. C. UNDERHILL, Demonstrator  
C. H. WAKE, Demonstrator  
W. D. GILL, Demonstrator

The department of clinical dentistry concerns itself with the supervision of the correct application of the principles and technique underlying the performance of operative procedures. At intervals of two weeks the student is directed to have in readiness for operative or prosthetic restorations cases determined upon by the head of the department. The student is required to give practical demonstrations of his ability to carry out successfully the operations indicated, the professor and his assistants supervising the several steps of the operation, pointing out weaknesses, suggesting improvements in technique and correcting misconceptions by the student of the teachings of the chairs involved. This course is intended exclusively for the senior student and is of invaluable aid by placing him in a position to correctly appreciate the necessity and duty of leaving no stone unturned in order to render to his patients the highest possible type of professional services.

This department is assisted by a number of prominent practitioners, who in the capacity of special instructors impart to the students the technique of individual methods of operative and prosthetic procedure.

**DEPARTMENT OF GENERAL PATHOLOGY**

J. WALTER REEVES, Professor

This course of lectures and laboratory demonstrations is given throughout the Junior year. The principles of General Pathology are thoroughly studied, and each student is required at intervals to discuss certain assigned topics before the class. Written reviews, quizzes, and the demonstration of gross and microscopical specimens are the features of this course.

The schedule of the work in this department is as follows:

Health and Disease. General Considerations of the Etiology of Disease. Disturbances of Circulation. Hyperemia and Anemia — Coagulation — Thrombosis — Stasis. Edema and Dropsy. Hemorrhages and Infarcts. Disturbances of Nutrition. Degeneration and Infiltration. Necrosis. Death. Hypertrophy and Degeneration of Tissues. Processes of Repair. Tumors—Disturbances of Development. Chronic Infectious Diseases. Tuberculosis. Syphilis. Actinomycosis. Glanders. Leprosy. Parasitic Diseases—Blood Parasites, Intestinal Parasites.

Hours .....64

Books—Copelin's Pathology; Manual of Pathology, Green.

## DEPARTMENT OF GENERAL AND DENTAL HISTOLOGY

A. C. LA TOUCHE, Professor

The first semester of the Freshman year is given to the subject of General Histology. Four hours laboratory work and two hours lecture work are required to complete the course. The elementary histological structures, especially those about the head and oral cavity, are studied thoroughly.

Dental Histology is taught during the second semester. Embryos' heads, which show all the phases of development of the teeth, are used in this course, each student preparing his own section, and making drawings of typical phases of development. Special time is devoted to the preparation and study of the hard tissues, which are prepared by the grinding machine, so that each student may learn minutely the structure of bone, enamel and dentine.

The histological laboratory is equipped with Bausch & Lomb microscopes, a McIntyre projection apparatus and other necessary apparatus.

Books—Shafer's Essentials of Histology.

Tomes Dental Anatomy. Noyes Dental Histology.



**DEPARTMENT OF BACTERIOLOGY**

ETHEL LEONARD, Professor

Bacteriology is taught by means of lectures and laboratory demonstrations throughout the Senior year. A comprehensive and practical discussion of the common infectious diseases is given, with especial emphasis on those diseases that show their effect on the mouth and teeth. Clutures are made of pyorrhea cases, and the bacteria isolated and studied. The bacteriological laboratory is equipped with oil immersion microscopes, a thermostat, and proper facilities for studying bacteria.

**DEPARTMENT OF RHINOLOGY AND LARYNGOLOGY**

JOHN MACKENZIE BROWN, M.D., Lecturer

The course in Rhinology and Laryngology consists in lectures and demonstrations on the Anatomy, Physiology, and Pathology of the Nose and Throat, and the diagnosis and treatment of the commoner diseases of the same and their special relationship to dental surgery, and in particular to orthodontia.

Hours .....6 hours

**DEPARTMENT OF PHYSICAL DIAGNOSIS**

J. WALTER REEVES, Professor

The object of this department is to familiarize the student with such diagnostisc procedures as are indispensable to an appreciation of the health status of his patients, especially in so far as the administration of anesthetics is concerned, or the undertaking of protracted operations in individuals with functional or organic lesions of the viscera. The course comprises lecture room work and clinics at the Los Angeles County Hospital, the patients in the medical wards being accessible to this department of instruction, under the immediate supervision of Professor Reeves.

Hours .....16

Book—Slade's Physical Diagnosis.

**DEPARTMENT OF ETHICS AND HYGIENE**

GARRETT NEWKIRK. Professor

**Ethics**

1. General principles; brief history.
2. In relation to one's clients and to civic life. Idea of service.
3. In relation to members of the dental and medical professions.

**Hygiene**

1. Definition, general principles, history.
2. Application—To the dentist himself: Laws of diet, exercise, cleanliness, sleep and rest, mental influence, etc.
3. Hygiene as related to dental office and equipment.
4. Oral hygiene, especially as related to the young in family or school.

Hours .....16

**DEPARTMENT OF EXTRACTIONS AND ANESTHETICS**ROY L. SPENCER, Lecturer  
C. J. APABLASA, Clinical Instructor

This course embraces a series of lectures upon the principles and practice of extracting. With a well-equipped extracting room and abundant clinical material, the student is afforded ample opportunity of becoming skilled in this work. This course is given in the Junior and Senior years. The course of fourteen lectures covers the following subjects.

Preparation and technique of administration of local and general anesthetics. Extracting instruments and their sterilization. Principles and practice of all classes of extractions. Preparation of patients and after treatment. Use of elevators and special instruments illustrated on skulls and models. Management of extracting patients. The value of suggestive therapeutics.

## DEPARTMENT OF INTERNAL MEDICINE

R. S. CUMMINGS, M.D., Lecturer

This course open to members of the Senior class only, consists of a series of lectures on general diseases and their relation to dentistry.

Hours .....6

## FEES AND EXPENSES

Fees are payable in two equal installments—October 1st and February 1st.

No student will be admitted for less than the stated fees.

**Freshman Year**

Matriculation fee .....\$ 5.00

Lecture ticket .....170.00

---

\$175.00

**Junior Year**

Matriculation fee .....\$ 5.00

Lecture ticket .....170.00

---

\$175.00

**Senior Year**

Matriculation fee .....\$ 5.00

Lecture ticket .....170.00

---

\$175.00

These fees include dissecting and all laboratory fees.

**Cost of Books and Instruments**

Before beginning his work, each student will be required to procure the instruments necessary for his use.

All of the books and instruments employed are needed after graduation. The outfit includes a dental engine, and enables the student to start practice, on finishing his course, without much additional expense for instruments. A list of the in-

struments is furnished the student on his arrival. The approximate cost is as follows:

Freshman year .....	\$125.00
Junior year .....	135.00
Senior year .....	85.00

Students are not admitted to class work and the Operatory until after purchasing the required books and instruments.

Students are advised to defer purchasing text-books until they have met the various professors and instructors in the class room and have been instructed definitely as to the books required in the different departments.

### ADDITIONAL ITEMS OF INFORMATION

Blank forms of application for admission will be sent by the Dean upon request.

All fees due the College are payable to the Treasurer at his office.

The matriculation fee must be paid to the Dean before the name of a student will be recorded.

There will be no return of fees by reason of suspension or expulsion.

When the student is obliged to withdraw from the College before the last four weeks of a session for no misdemeanors, but for good and sufficient reason, to be determined in all cases by the Faculty, he is entitled to a remission of three-fourths of the amount due for that portion of the time during which he receives no instruction; this remission to date from the reception by the Dean of a written notice of the student's withdrawal from the College.

Graduate dentists are admitted to the Operatory for a smaller fee where the degree is not taken.

The student can live in Los Angeles as in other large cities, according to his means or his habits of life. Good room and board near the College may be had for \$25.00 per month.

Laboratory benches and operating chairs are assigned to students in the order of matriculation, and each student is required to employ the same throughout the session.

Students will not be admitted to class work or the Operatory until after purchasing required books and instruments.

Operations in the technique departments of the school require a large number of natural teeth, and a sufficient supply is sometimes difficult to procure. Students will therefore find it to their advantage to bring all the extracted teeth they can obtain.

Alumni and friends of the College are requested to send to the College boxes of extracted teeth. The College will be grateful for such favors and will gladly pay all express or other charges on such packages.

Blank forms for application for admission will be sent by the Dean on request.

Address all communications to

THE COLLEGE OF DENTISTRY  
University of Southern California  
Lewis E. Ford, D.D.S., Dean  
Sixteenth and Los Angeles Streets,  
Los Angeles



# THE COLLEGE OF THEOLOGY

## HISTORICAL

The Southern California Annual Conference of the Methodist Episcopal Church, at its first session in 1876, gave earnest thought to the subject of Christian education. In that year the Conference recognized a school that had been established by the Reverend and Mrs. O. S. Frambes and adopted it as the "Los Angeles Academy."

In 1879 the Conference decided to organize the University of Southern California and elected its first Board of Directors, and in 1880 the trustees of the Academy closed the school and transferred its property to the University. In September of that year Bishops Wiley and Simpson laid the corner stone of the first University building (the one now occupied by the Department of Civil Engineering), and in October the doors were opened to students in the University of Southern California.

In 1884 the Committee on Education reported to the annual conference a resolution recommending "Our Theological Schools at Boston, Madison and Evanston," and hoping that "the day may not be far distant when we can add this department to our own University." Through the generosity of the Honorable Charles Maclay of San Fernando, California, this hope began to be realized the next year. The University Year Book, 1855-6, reports a three-story brick building 70x90 feet in dimensions, and a campus of ten acres, as the equipment of the "Maclay College of Theology."

Its first Dean was the Reverend R. W. C. Farnsworth, taken for this place from the Presiding Eldership of the Los Angeles District. The appointment of the Reverend Fletcher B. Cherrington, A. M., and the Reverend James Blackledge, A. M., completed the initial Faculty and the College opened. On the death of Dean Farnsworth, the Reverend F. B. Cherrington was appointed Acting Dean for the remainder of the school year. The Reverend R. S. Maclay, D.D., veteran mis-

sionary from the Orient, and brother of Senator Charles Maclay, was then called to the headship of the College that bears his name. When advancing years and failing health caused the resignation of Dr. Maclay, the Reverend George Cochran, D.D., was elected to succeed him. Through this period the new School of Theology did excellent work, coming about the time of the succession of Dr. Cochran from its home in San Fernando to the immediate neighborhood of the College of Liberal Arts in Los Angeles.

In the hard times of 1893 the Trustees thought it expedient to close the Maclay College until its resources should warrant the continuance of its work.

In 1907, on the urgent request of the Annual Conference, the Trustees of the University decided to re-open the School of Theology, and upon request of the Board, Ezra A. Healy, D.D., just completing his seventh year in the pastorate of the University Church, was assigned to the task of reorganizing Maclay College and was appointed Dean. The first class under the new regime was graduated in 1911.

## COURSES OF INSTRUCTION

It is the aim of the College of Theology to do all that is possible to furnish the churches of our constituency with preachers who shall be at once scholarly and evangelical, and pastors who shall be apt and successful in their difficult work. As will be seen by reference to the accompanying table, undergraduates in the Annual Conference find here that nearly all the subjects required in the Conference Courses may be taken in the regular college classes. The student, therefore, has the great advantage of substituting drill, question, and preparation of papers for solitary reading.

In pursuance of this aim the following courses are arranged with the specified conditions of admission:

1. **The Degree Course.** A three years' course for students who have obtained the A.B. degree. The completion of this course will entitle the graduate to the degree of Bachelor of Divinity.

## COURSES

### CLASSICAL

(DEGREE)

#### Junior Class

ELEMENTARY GREEK  
HEBREW  
ENGLISH BIBLE  
CHURCH HISTORY  
PASTORAL THEOLOGY  
SYSTEMATIC THEOLOGY

#### Middle Class

GREEK NEW TESTAMENT  
HEBREW  
HISTORICAL THEOLOGY  
PRACTICAL THEOLOGY  
SYSTEMATIC THEOLOGY  
SOCIOLOGY

#### Senior Class

N. T. GREEK EXEGESIS  
HEBREW  
PRACTICAL THEOLOGY  
SYSTEMATIC THEOLOGY  
(Seminar)  
MISSIONS AND COMPARATIVE  
RELIGION  
SOCIOLOGY  
SACRED ORATORY

### GREEK-ENGLISH

(DIPLOMA)

#### Junior Class

ELEMENTARY GREEK  
ENGLISH BIBLE  
CHURCH HISTORY  
PASTORAL THEOLOGY  
SYSTEMATIC THEOLOGY  
MODERN MISSIONS

#### Middle Class

ENGLISH BIBLE  
HISTORICAL THEOLOGY  
PRACTICAL THEOLOGY  
SYSTEMATIC THEOLOGY  
SOCIOLOGY  
ORIENTAL MISSIONS  
GREEK NEW TESTAMENT

#### Senior Class

N. T. GREEK EXEGESIS  
PRACTICAL THEOLOGY  
SYSTEMATIC THEOLOGY  
COMPARATIVE RELIGION  
SOCIOLOGY  
SACRED ORATORY

### ENGLISH

(CERTIFICATE)

#### Junior Class

ENGLISH BIBLE  
CHURCH HISTORY  
PASTORAL THEOLOGY  
SYSTEMATIC THEOLOGY  
MODERN MISSIONS  
ENGLISH LITERATURE

#### Middle Class

ENGLISH BIBLE  
HISTORICAL THEOLOGY  
PRACTICAL THEOLOGY  
SYSTEMATIC THEOLOGY  
SOCIOLOGY  
ORIENTAL MISSIONS  
ENGLISH LITERATURE

#### Senior Class

PRACTICAL THEOLOGY  
SYSTEMATIC THEOLOGY  
COMPARATIVE RELIGION  
SOCIOLOGY  
SACRED ORATORY  
ENGLISH LITERATURE

**2. The Diploma Course.** This is also a three years' course, open to students who have the equivalent of junior standing in the College of Liberal Arts, including the completion of all the required courses. The Maclay College Diploma will be granted to graduates in this course.

**3. The English Course.** Applicants who have graduated from High School, or who, on examination, are found to have done work equivalent to the full college entrance requirements, may be admitted to this course, and on its satisfactory completion will receive a certificate of graduation.

**4. Special Students.** Applicants will be admitted as special students to classes that, in the judgment of the faculty, they can enter with advantage, and certificates will be given for all subjects satisfactorily taken.

## Departments of Instruction

### APOLOGETICS

The whole subject of the defensive facts and proofs of Christianity is included in this general term. Primarily it is found in the courses in the English Bible, given by Professor Hill, including Hermeneutics and Christian Evidences. Historical and Systematic Theology contribute to the full equipment of the student in this field.

### BIBLICAL INTRODUCTION

JOHN G. HILL, Professor

This course, which deals primarily with Christian Evidences and the Foundations of Faith, will take up those phases of thought and facts of life that confront the student of today—the idea of God and the divine immanence; man and the legitimacy of the religious principle in the human constitution; the Bible as a revelation of God's relation to and purpose concerning man's life and destiny; the facts of conversion and the history of Christianity as witnesses to the divine origin of the system; and a consideration of the assumptions of modern cults that oppose or offer themselves as substitutes for Christianity.

**RELIGIOUS EDUCATION****J. H. MONTGOMERY, Professor**

A course designed to fit the student for teaching Bible classes in Sunday Schools, teacher-training courses, etc. The course considers the teacher, his work, qualifications, and preparation; the student, his physical, mental, and moral nature; the lesson; the teacher's approach to the student, etc.

In the second semester attention is given to modern church organizations, forms of church government, the Sunday School and other auxilliary organizations.

**CHURCH HISTORY****TULLY C. KNOLES, Professor**

The first year begins with the doctrinal development of the early Church, its controversies and councils; the adoption of the Church by the State, and the result; the rise of the Holy Roman Empire, and the organization of the Papacy. It discusses the great men of the early Church and the later results of monasticism and the Crusades; the rise and spread of Mohammedanism; Scholasticism and the Renaissance; and the pre-Reformation men and movements. Epochs are dealt with and an attempt is made to lead the student to study the great formative movements, and to relate one event to another, and thus to study advances and reactions. The history of doctrine is reviewed, with special attention to those tenets having far-reaching results.

The second year begins with the Reformation and traces its development under its various leaders. The English Reformation is followed from Wycliffe to the period of the Commonwealth. French Infidelity, German Rationalism, and English Deism are considered in their relation to later religious movements. The denominations, the missions, the cults, and the forward and reactionary movements of England and America are discussed.

In the session of 1916-17 the second year's work will be taken with Doctor Klingberg. See History 8 and 9, College of Liberal Arts.



## FOREIGN MISSIONS

ROBERT J. TAYLOR, Professor

This course of lectures deals with the History of Missions in all lands. The study comprises the periods of preparation for modern missions; the present conditions in non-Christian mission fields; men and methods in missionary work; a survey of the Methodist Episcopal Missions; the problems of specific fields; the extent of occupancy; and the qualifications and types of leadership needed in different countries.

Students who anticipate work in the foreign field will find this course an excellent preparation for further pursuance of their studies of Oriental questions in the special department of which Dr. James Main Dixon is the Director.

**The Genesis of Missions.** Books: "The Mission and Extension of Christianity in the First Century," by Harnack; "Missions and Apostles of Medieval Europe," by Maclear.

Two units, first semester.

**The Modern Progress of Christianity.** Book: "Outlines of a History of Protestant Missions," by Warneck.

Two units, second semester.

**Missions in Africa and the Pacific Islands.**

Two units, first semester.

**Missions in Spanish America.**

Two units, second semester.

## ORIENTAL PHILOSOPHY AND COMPARATIVE RELIGION

JAMES MAIN DIXON, Professor

**Oriental Philosophy and Religions.** Zoroastrianism, the Forest Philosophers of India, Hindu Speculation, Buddhism, Shamanism, Confucianism, Taoism, Shintoism and Bushido.

Two units, first semester.

**Missions in India and Persia Since the Days of Ziegenbalg.** The life work of Carey, Martyn, Duff. The Judsons in Further India.

Two units, second semester.

Alternate with—

**The Civilization of Japan.** Two units, first semester.

**Missions in Japan, Korea, Formosa and the Philippines.**  
Two units, second semester.

### **SPECIAL STUDY OF CHINA**

JOHN HEDLEY, Lecturer

**The Civilization of China.** Text Book: Fryer's "Oriental Studies." One unit, first semester.

**Missions in China: the Problem Today.**  
One unit, second semester.

### **HYMNOLOGY**

A study of Hymns, ancient and modern, with critical discussions. Two hours, second semester. (Dixon.)

### **ENGLISH LITERATURE AND EXPRESSION**

This very important part of a preparation for the ministry is given a prominent place. In addition to the forty-five courses in the English Department of the College of Liberal Arts, special opportunity for study and training in interpretation and expression is afforded in the College of Oratory, which is conveniently located near the Maclay College.

### **SACRED ORATORY**

In the Senior year, in each course, a minimum of two hours per week in both semesters is required in this department. The work includes instruction and practice in public speaking and careful training in the reading of the Bible and of hymns. Given in the College of Oratory.

## NEW TESTAMENT GREEK\*

CLAUDE C. DOUGLAS Professor

1. **Beginning Greek.** Those who have had no previous training in the Greek language will register for course 1 in the College of Liberal Arts.

2. **The Gospel according to John** will be studied as a basis for mastering the language of the New Testament. Harper and Weidner's "Introductory Greek Method" will be used throughout the year. Four hours, first semester.

3. **The Synoptic Gospels**, with special study of Mark; Matthew and Luke as related to Mark. The Synoptic Gospels as compared with John. Four hours, second semester.

## HEBREW LANGUAGE AND HISTORY\*

JAMES BLACKLEDGE, Professor

The main object of instruction in this department is the securing of a good reading knowledge of the Hebrew text; hence during the first two years of the course special attention is given to oral class-reading exercises, the fundamental principles and rules underlying the Hebrew language, and the origin of grammatical forms, with some exegetical study during the second semester of the second year. The method employed aims, by constant review and frequent composition exercises, to make an otherwise dry subject as interesting as possible.

The greater part of the first two years is devoted to the study of the text of the Pentateuch. During this time the student is requested to look up the inscriptions of Israel's Neighbors—the Assyrians and Babylonians—in the library, as an aid in the study of the text. The latter half of the course will be largely devoted to exegetical studies, studies in Messianic prophecy and in the minor prophets, and a critical study of the Book of Job. During the last semester there will be grammatical, critical and exegetical studies of selec-

---

\*In the study of Greek and Hebrew, exegesis of the book proceeds with the reading of the text.

tions from the Book of Psalms. During the entire course occasional lectures will be given on the Old Testament and related subjects.

The effort is, not to read meanings into the passages considered, but to get the original author's exact viewpoint. This is often a most difficult task, and calls for the application of modern scientific methods of exegesis. To obtain the exact idea intended by the author, the interpretative principles, methods, and rules must be learned and applied. Some knowledge of the Greek language will be helpful. Prerequisites, Bible 1, 2, 3, 4. Two hours throughout the year. Tuesday and Thursday (hours to be arranged).

## **HOMILETICS AND PASTORAL THEOLOGY**

W. E. TILROE, Professor

The whole range of the life and work of a minister of the Gospel passes under review in these courses, which continue throughout the three years. The call and commission of the preacher, the history of preaching with notice of some of the eminent preachers of the past and the present, doctrinal preaching, evangelistic preaching, the pastor and the Sunday School, the ministers and social problems, church organization, the institutional church, pastoral visitation, and kindred subjects, will all have the consideration that their importance demands. In the special department of Homiletics the written sermon, the extemporaneous sermon, and the exercise of preaching before the student body will have prominent place.

## **SYSTEMATIC THEOLOGY**

Dean EZRA A. HEALY

In the Junior year the textbook is Curtis' "The Christian Faith"; in the Middle year Sheldon's "System of Christian Doctrine." While these works form the basis of study for the students out of class, a wide reference to authors, old and new, is encouraged, and all is supplemented by lectures and questions in the classroom hour. In the Senior year research in the library and in current theological literature, with

essays on assigned subjects, and a continued attendance in the lecture room, will complete the work in this important field.

The earnest and consistent aim of this department is to discover, maintain and defend the essentials of the Christian system. A solid Biblical basis is sought for every doctrine. Special centers of study are the Deity of the Lord Jesus, the Atonement, and the Salvation which is by Faith.

### **SOCIOLOGY**

**ROCKWELL D. HUNT**, Professor

**EMORY S. BOGARDUS**, Professor

**The Principles of Sociology.** The elements of social theory, and the structure, development and activities of human society. A comprehensive study of the social process and social ends, with frequent application to concrete conditions.

Three units, first semester.

**Social Theories.** A comparative study of the writings of leading sociologists of the present day. Extensive library work and frequent student reports are among the requirements.

Three units, second semester.

With the permission of the Dean and the Department of Sociology, students may substitute for Social Theories the following:

**Charities and Correction.** Studies in social pathology, poverty and philanthropy, the dependent classes, and the public and private administration of charities. The class visits charitable and reformatory institutions in Los Angeles and the vicinity to study conditions and the methods of social betterment.

Three units.

### **SPECIAL ADVANTAGES**

The School of Theology is in the immediate neighborhood of the College of Liberal Arts. It is constantly urged upon our students that the religious leaders must be intellectual leaders, and so a degree in Arts is made a prerequisite to a degree in Theology.



The intellectual atmosphere of the University tends to foster ambition in our men, and many who come intending to take Course I, or at most Course II, are glad to lay the broader foundation of a university education.

Students taking any one of three courses in Theology will be allowed four hours in each semester in the College of Liberal Arts free of charge.

The Pauline Association, organized by the students of Maclay for mutual literary and religious improvement, is useful and flourishing.

The Young Men's Christian Association of the University is well sustained and offers a fine field for both growth and work.

Able men are in the pulpits of the city churches and so inspiring models of gospel preaching are always available.

The Methodist Mission of Los Angeles calls upon our men for help throughout the year, furnishing opportunity for the best kind of training.

## FEES AND EXPENSES

Tuition in Maclay College is free.

A registration fee of \$12.00 a semester is charged.

The requirement of two hours throughout the Senior year in Sacred Oratory is met by enrollment in the College of Oratory, and does not involve extra expense.

Lectures by men and women of eminence in special fields are frequently given in the Assembly Hall and are free to all our students.

Free residence in the Maclay College Building is provided for a limited number. Rooms will be assigned in the order of accepted applications.

Numerous churches in the vicinity of Los Angeles find pastors among our students, and the District Superintendents are glad to make such arrangements where it is mutually satisfactory.

An information and employment bureau is maintained by the University Y. M. C. A., which is very helpful to those who wish to support themselves while in attendance at college.

Any additional information promptly given on application to

E. A. HEALY, Dean,  
The Maclay College of Theology,  
University of Southern California,  
Los Angeles.

# THE COLLEGE OF PHARMACY

The pharmacist of today requires a high grade of technical knowledge. The College of Pharmacy, an integral department of the University of Southern California, was organized to supply this demand; its aim and purpose being to create a means for higher pharmaceutical education, and to supply a broader foundation for the student's professional career by providing systematic instruction and special training in those subjects requisite for the successful practice of pharmacy.

## LOCATION AND EQUIPMENT

The College of Pharmacy is located at 35th Place and University Avenue on the campus of the University of Southern California.

The advantages of the metropolitan location of this College in the city of Los Angeles are obvious.

### University Advantages

The close association of the student of the College of Pharmacy with those of the other colleges of the University on the campus affords valuable opportunities of social culture and of attending prominent lectures on subjects of vital interest to the student.

## SCHEDULE

The session will open October 3, 1916, and will continue until May 30, 1917. The schedule is arranged for the forenoon so as to allow students the privilege of retaining their positions as clerks in the stores of Los Angeles and neighboring towns while attending college. The hours of instruction are from 8 a. m. to 12 m.

## CURRICULUM

The subjects included in the curriculum are operative and dispensing Pharmacy; organic, inorganic, and analytical

Chemistry; Botany; Materia Medica; Pharmacognosy; Toxicology; Hygiene; Physiology; Sanitary Science; Food and Drug Analysis; and Microscopy; together with special lectures upon business topics especially suited to the retail pharmacist. The methods of instruction embrace lectures, demonstrations, recitations, written and oral examinations, constant laboratory work, and individual instruction.

### CONDITIONS OF ADMISSION

**a. To the Junior Class.**—Applicants must be at least seventeen years of age. Scholastic requirements for admission may be met as follows:

1. Graduation from an accredited high school or other preparatory school of approved rank, requiring for graduation not less than fifteen units\* of work successfully carried.

2. The completion of two years of high-school work or its equivalent after eight years of grammar-school work. This must consist of not less than eight units of high-school work.

Any deficiency in the entrance conditions may, during the first year's work in Pharmacy, be removed in the Preparatory School of the University or with a tutor approved by the College of Pharmacy.

**b. To Advanced Standing.**—Students who have pursued courses of study in other colleges of pharmacy will be given credit for such portions of their work as are equivalent to the work required by this College.

3. **To Graduate Standing.**—Persons who have received the degree of Graduate in Pharmacy (Ph. G.) from this College, or who have received an equivalent training elsewhere, are eligible to the graduate courses.

---

\*The term "unit" is here used to denote a preparatory subject studied throughout one school year with five class exercises (or the equivalent) a week. This grade of preparation is equivalent to that indicated for admission to the College of Liberal Arts, in present year-book, pages 40-52.

## EXAMINATIONS

Written examinations are held from time to time during the session in each of the subjects taught by the professors, and the ratings received are recorded. Attendance upon these examinations is compulsory. Any student unavoidably absent is required to give the professor a written statement of the cause of his absence.

Each student is required to attend at least eighty per cent of the lectures and laboratory sessions in each department, and failing to do so becomes ineligible for examinations except where, prior to the examination, he presents a satisfactory excuse for his absence.

## CONDITIONS FOR GRADUATION

The candidate for the degree of Graduate in Pharmacy (Ph. G.) from this College must have fulfilled the following conditions:

1. He must be of good moral character and must have maintained an irreproachable moral standing while in attendance at this College.
2. He must have attended two full years in each of the departments of this College, or one year (the Senior) in this, after a course in some other recognized College of Pharmacy.
3. He must have attended at least eighty per cent of the lectures, reviews, and laboratory work.
4. He must be present at Commencement unless excused by the Dean.

## Departments of Instruction

### PHARMACY

ARTHUR R. MAAS, Professor

1. **Junior Pharmacy.** The lectures of the Junior year treat of the history of the Pharmacopoeia. The subjects of weights and measures, percentage solution, and the arithmetic of dispensing and manufacturing pharmacy are considered at



length. Specific gravity and specific volume are demonstrated from various apparatus, which the lecturer thoroughly explains. Heat is next considered, and then the operations wherein heat is used, as evaporation, distillation, sublimation, desiccation, exsiccation, etc. This is followed by a discussion of the preservation of crude drugs and their preparation for manufacturing purposes, and the operations of decantation, filtration, clarification, maceration, infusion, decoction, and pharmacy. While they are discussed from the standpoint of percolation. The standard galenical preparations are critically studied in alternation with those of extemporaneous pharmacy. While they are discussed from the standpoint of their several classifications, such individual preparations as merit it receive special consideration, the object being to familiarize the student with the reasons for each step taken in the manufacture of the different preparations. Two lectures and six laboratory periods each week; throughout the year, Junior year.

**2. Senior Pharmacy.** The lectures of the Senior year embrace the study of the inorganic and organic acids and the salts of the different metallic bases. The commercial methods of preparation are touched upon, and a special effort is made to teach the student how to prepare them extemporaneously when necessity arises. In addition to the official compounds, those unofficial ones which, through frequency of use, merit it, likewise receive attention. A study of alkaloids and the neutral principles of vegetable drugs follows. Extemporaneous pharmacy is then resumed, including a thorough discussion of dispensing. Facsimiles of physicians' prescriptions are, by means of the stereopticon, thrown upon a screen, and the class is drilled in reading those that are with difficulty legible. Chemical and Pharmaceutical incompatibilities are considered, and the best methods for overcoming them are discussed. Two lectures and six laboratory periods each week; throughout the year, Senior year.

**3. Manufacturing Pharmacy.** Visits are made to several large manufacturing establishments where the preparation of

pills, tablets, fluid extracts, etc., is studied at length from a manufacturing standpoint.

## **BOTANY AND MICROSCOPY**

**ALBERT B. ULREY**, Professor  
**ANDREW C. LIFE**, Associate Professor

These courses in Botany and Microscopy are planned with especial reference to the needs of the pharmacist. Since most drugs are parts of plants or are plant-products, a thorough knowledge of plant life is necessary to their dispensing.

In these courses the student is furnished with a compound microscope, a hand lens, and dissecting instruments. The lecture room is supplied with a complete electrical projection apparatus by which microscopic objects can be thrown on the screen before the class.

**1. Botany.** The year is devoted to the study of seed-bearing plants (the Spermaphyta), following by a briefer consideration of the Algae and Fungi (Thallophytes), the Mosses and Liverworts (Bryophytes), and the Ferns and their allies (Pteridophytes). (1) The parts of the flower, leaf, root, and stem are studied with reference to the classification of plants and the nomenclature in each of the more important families. (2) The microscopic structure of the parts of the plant is then studied in order to familiarize the student with the kinds of cells found in the stem, root, and leaves, preparatory to the study of pharmacognosy. (3) A study is made of the manner in which drug products are produced by the life-processes and habits of plants. Special attention is given to those plants that are of importance to the pharmacist. One lecture and one laboratory hour per week; throughout the year, Junior year.

**2. Microscopy.** Throughout Course 1 the student has been learning the use of the microscope, its parts, the methods of preparing slides for temporary use, etc. In Course 2 the student examines and uses the different kinds of microscopes and accessories. He learns how to measure microscopic objects (micrometry) and how to prepare permanent slides

of tissues and other objects. The laboratories are fitted up with a complete set of apparatus for photographing microscopic objects; ten styles of compound microscopes of foreign and American makes; four styles of microtomes; a camera lucida; condensers; micrometers; and several hundred prepared slides for use in class work and demonstration. Two hours laboratory per week; throughout the year, Senior year.

## MATERIA MEDICA AND PHARMACOGNOSY

ANDREW C. LIFE, Associate Professor  
CHARLES W. HILL, Lecturer

1. **Junior Course.** This course presents the subject in as broad, yet concise, form as possible. It is confined to that instruction that will be of greatest benefit to the student when the course is completed, giving larger consideration to those drugs that are most frequently met with in commerce. The course treats first of the drugs of vegetable (phanerogamic and cryptogamic) origin, and then proceeds to consider the drugs of animal derivation. These agents are considered in an order based upon a commercial classification; first the Roots, then the Phizomes, the Bark, the Flowers, the Fruit, the Seeds, etc. Each drug is considered as to its nature, origin, commercial and botanical relation, microscopical structure, active principles, therapeutic action, doses, etc. Adulterations, admixtures, and substitutes are thoroughly discussed. The work is based upon the Pharmacopoeia; at the same time due attention is given to those remedies that are unofficial. One lecture and two hours laboratory per week; throughout the year, Junior year.

---

## CHEMISTRY

LAIRD J. STABLER, Professor

1. **General Inorganic Chemistry.** This is a course of lectures and demonstrations designed to be an introductory course in general chemistry, and including a consideration of the principles governing chemical action and a description of the properties of the various elements and their compounds,

as well as drill in the meaning and use of symbols in chemical formulae and equations. Special emphasis is placed on chemical facts involved in the daily work of a pharmacist.

In the laboratory the student is provided with a complete equipment of apparatus for qualitative analysis. A detailed study of the chemical and physical properties of the non-metals and their more important compounds is made, and practical instruction is given in elementary qualitative analysis. Two lectures and six hours laboratory per week; first semester, Junior year.

**2. Qualitative Analysis.** This course, following that in General Inorganic Chemistry, is a study of the methods of separation and identification of the principal bases and acids. In this work the identity and purity tests of the Pharmacopoeia are studied. The student analyzes for bases and acids a number of compounds unknown to him and makes tests for impurities in pharmaceutical and commercial chemicals. Two lectures and six hours laboratory per week; second semester, Junior year.

**3. Organic Chemistry.** The course covers the whole field of this branch, which is of first importance to the pharmacist. Special attention is paid to those compounds that are of pharmaceutical value, including synthetical and medicinal preparations. The following subjects are studied with care: Hydrocarbons, alcohols, ethers, compound ethers, aldehydes, glycerin, fats, soaps, oils, carbohydrates, organic acids amines and amides, aromatic bodies, resins, albuminoids, cyanogen compounds, alkaloids, etc. Some of the important chemical operations occurring in nature receive attention, such as combustion, decay, fermentation, and putrefaction. The laboratory work consists of the preparation of typical organic preparations illustrating the general reactions involved in organic chemistry. Among the preparations made are ether, chloroform, iodoform, acetic ether, nitrous ether, acetanilide, methyl salicylate, etc. Two lectures and six hours laboratory per week; first semester, Senior year.



**4. Pharmaceutical Analysis and Specialties.** This course emphasizes general qualitative analysis, and then advances to those types of advanced special analysis upon which the pharmaceutical chemist may most frequently be called on to render expert opinion. Two lectures and six hours laboratory per week; second semester, Senior year.

The work of the course is divided as follows:

**(a) Quantitative Analysis.** An introduction to the underlying principles of gravimetric and volumetric analysis. Attention is paid to the standard "Volumetric Solutions" of the Pharmacopoeia.

**(b) Toxicology.** Lectures in which are studied the different kinds of poisons, the classes of antidotes, the various bodily conditions that modify the effects of poisons, and the different channels by which poisons may enter the body. Later each poison is taken up in detail and studied as to its lethal dose, symptoms, antidote, and treatment. Attention is given to Posology, doses of potent drugs being given special emphasis. The practical laboratory work deals with the identification of the common poisons and also with the methods of separating them from various complex mixtures.

**(c) Urine Analysis.** Lectures on both the normal and the pathological constituents of urine. In the laboratory the qualitative and quantitative estimation of sugar, albumin, urea, etc., is studied, and microscopic examination is made of the sediment.

**(d) Food and Drug Analysis.** Lectures and laboratory work. Each student will be required to make a number of assays of United States Pharmacopoeia preparations, and also to examine food products for preservatives and adulterants. The official methods of analysis of the Department of Agriculture will be employed.



**PHYSIOLOGY, HYGIENE, AND SANITARY SCIENCE**

ALBERT B. ULREY, Professor

The action of drugs on the body is a subject demanding attention from the pharmacist. He is responsible both morally and legally for the results of his sale of drugs. A knowledge of the human body, its functions, and its proper care therefore becomes an absolute necessity to the present-day pharmacist.

**1. Physiology.** A study of the human body, its parts, and the way it carries on the functions of digestion, circulation, etc. All the systems of organs are considered, and each of the fundamental processes is studied. The semester's work prepares the student to understand to some extent what actions drugs may have on the body. One hour lecture and demonstration per week; first semester, Junior year.

**2. Hygiene.** The care of the body as to the use of foods, drink, fresh air, exercise, etc.; the methods by which one may enjoy health as a result of right living and the injury likely to result from wrong habits; and the place of drugs in everyday affairs as they are related to hygiene. One hour lecture and demonstration per week; second semester, Junior year.

**3. Bacteriology.** The nature of bacteria, the methods of growing them, and their place in nature. A sufficient acquaintance with these form is attained to enable the pharmacist to know which bacteria are beneficial, which disease-producing; what conditions are harmful and what not; how to prevent decay in foods, and other substances; and the best methods of sterilizing and disinfection. Water, milk, and other foods receive special study with reference to the bacteria they contain. This course gives sufficient practice in handling bacteria to dissipate needless fear of them and to enable one to guard against the danger of infection where disease-producing forms are likely to be present. One hour lecture and demonstration per week; first semester, Senior year.

**4. Sanitary Science.** A study of (1) the nature of infectious diseases and their dissemination and control; (2) the problems of water-supply and sewage; (3) the distribution and care of foods in relation to the public health; (4) sanitary surveys of residences, resorts, and public buildings; and (5) the various agencies for the federal, state, and municipal supervision of the public health. Each student makes a study of a residence or a public building and incorporates his findings in a report to be completed prior to the final examinations. One lecture per week; second semester, Senior year.

### AUXILIARY LECTURE COURSES

C. L. LOWMAN, M.D., Lecturer in Medicine  
HOWARD P. PEAIRS, Lecturer in Jurisprudence  
L. SCHIFF, Lecturer in Commercial Pharmacy

**1. First Aid to the Injured.** This course of several lectures is planned to meet the immediate needs of the pharmacist, who is often called upon to render first aid in accidents and do general emergency work. The subjects touched on are wounds and their treatment, burns, fractures and dislocations, poisoning, resuscitation from unconscious conditions, bandaging, etc. Senior year.

**2. Commercial Pharmacy.** This course consists of several lectures on topics in connection with the conduct of the business of Pharmacy, such as buying, selling, insurance, advertising, bookkeeping, correspondence, and general business building. Senior year.

**3. Pharmacal Jurisprudence.** This course consists of several lectures in which the rights and responsibilities of pharmacists and the laws affecting them are taken up and fully considered. The statutes regulating the practice of Pharmacy, with their constitutionality, are discussed. The legal limits of Pharmacy, the right to practice, the legal qualifications of the pharmacist, etc., are considered, together with the liability of the pharmacist and the manufacturing pharmacist. Senior year.

**GRADUATE COURSE IN PHARMACY**

The Graduate Course in Pharmacy is open to graduates of this college and to graduates of other colleges requiring equivalent qualifications for graduation. The course leads to the degree of Bachelor of Pharmacy (Phar. B.).

To attain to the degree of Bachelor of Pharmacy (Phar.B.), the candidate must have complied with the following conditions:

1. He must be a graduate of a high school requiring for graduation the completion of not less than the fifteen units required for admission to the College of Liberal Arts.

2. He must have received, at this College or from some other reputable College of Pharmacy, the degree of Graduate of Pharmacy (Ph.G.) under the conditions specified above.

3. He must have completed at this College a graduate course consisting of not less than twenty-five units of University work and including the preparation of a satisfactory thesis embodying the results of original investigation in a subject in or allied to pharmacy or chemistry.

The University courses from which the graduate course in Pharmacy may be elected are as follows:\*

**Chemistry 7. Organic Chemistry.** Lectures and recitations on the chemistry of the carbon compounds. Perkin and Kipping's "Organic Chemistry." Two units; both semesters.

**Chemistry 7a. Organic Preparations.** A laboratory course in the preparation of typical carbon-compounds in both the aliphatic and aromatic series, to accompany course 7. Two units; both semesters.

**Chemistry 7b. Organic Preparations—Advanced.** A laboratory course in the preparation of higher organic compounds, with supplementary reading on theory and methods. This course is recommended to graduate students who expect to do technical work in the field covered by organic chemistry,

---

\*In the following list one "unit" equals one lecture or recitation hour or two laboratory hours.

or who desire to pursue research in chemistry for higher degree. Either or both semesters.

**Chemistry 8. Mineral Analysis.** Gravimetric and volumetric analysis of representative minerals, ores, and alloys. Prerequisite, course 4 or its equivalent. Three or five units; either semester.

**Chemistry 9. Physical Chemistry.** A lecture course or its equivalent. A general study of electro-chemistry is included in the work of the second semester. Bigelow's "Theoretical and Physical Chemistry" will be used as a main reference book. Two units; throughout the year.

**Chemistry 9a. Physical Chemical Measurements.** A laboratory course to accompany or follow course 9. Molecular and atomic weight-determinations by vapor-density, boiling-point and freezing-point methods. Problems in chemical equilibrium and reaction velocity. Determination of conductivity of electrolytes, fraction ionized, ionic mobility, single and double potentials, the preparation of standard cells. Three hours of laboratory work a week. One unit; throughout the year.

**Chemistry 10. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, etc. Prerequisite, course 4 or its equivalent. Three or five units; either semester.

**Chemistry 12. Food Analysis.** A laboratory course in the chemistry of meat and meat products, edibles and fats, dairy products, cereal products, saccharine products, canned vegetables, cocoa, tea, coffee, spices, vinegar, flavoring extracts, fruits and fruit products, fermented and distilled liquors, baking powders, food preservatives, and coloring matter. Open to students who have completed courses 4 and 7. Two units; either semester.

**Chemistry 13. Industrial Chemistry.** A lecture course covering the chemistry involved in the manufacture of oils, soap, sugar, explosives, and other commercial products. Lectures will be given by chemists from various manufacturing estab-



lishments. Prerequisites, courses 2, 3, and 7. One unit; second semester.

**Chemistry 13a. Oil and Gas Analysis.** A laboratory course in commercial oil and gas analysis. A special oil laboratory is equipped for handling crude petroleum on a basis commensurate with commercial practice. Two units; second semester.

**Chemistry 14. Assaying.** This course comprises silver and gold extraction by scorification and crucible methods; the fire-assay of copper, lead, and tin; the extraction of gold from ores by the amalgamation, the chlorination, the cyanide, and the electrolytic processes. Two units; second semester.

**Chemistry 16. Research.** Research work, under the direction of the department, may be pursued in either pure or applied Chemistry.

**Biology 20. Advanced Bacteriology and Sanitary Science.** The course consists of an advanced study of Bacteriology in its relation to hygiene, sanitary science, and the work of the pharmacist. It consists in part of testing water, staining bacteria, and testing disinfectants, together with a study of the bacteria of foods. Two units; throughout the year.

**Pharmacy 30. Thesis.** Graduate students are required to present a graduating thesis showing the result of some original work in one of the departments of pharmacy. The subject of the thesis must have the approval of the professor in whose department the thesis is selected. Thesis subjects should be selected not later than the middle of the first semester. The completed work must be handed in two weeks before the close of college.

## FEES AND EXPENSES

**Tuition Fees.** The tuition fee for each year is \$100. The payment of this fee entitles the purchaser to one continuous course of lectures and laboratory instruction in all departments. The tuition fee covers all drugs, chemicals, and



other materials (with the exception of a few expensive drugs and chemicals) consumed by the student in the laboratories.

**Special Students** may, by permission of the faculty, take any part of the course at a proportionate tuition fee, providing that such fee shall not be less than \$25.00. Medical students will find a systematic instruction in pharmacy an excellent foundation for a medical course. The instruction offered in pharmacy will also give a working knowledge of chemistry to those interested in the engineering and metallurgical industries.

**Laboratory Deposit.** Chemical and pharmaceutical apparatus and supplies, together with microscopes and other implements required in the work of the course, are furnished by the College without expense to the student, but breakage or damage to the apparatus must be paid for. For this reason each junior or senior student is required to deposit \$15.00 with the Secretary. This deposit, or such portion of it as is not required for the specified purpose, will be refunded at the close of the term.

**A Diploma Fee** of \$10.00 will be required.

**Payment of Dues.** All fees are to be paid at the beginning of the term. Where this is impossible, the laboratory deposit and at least one-half of the tuition fee must be paid upon entering the class, the balance of the tuition fee to be secured by note to be paid sixty days from the date of matriculation. Non-payment of fees debars the student from the final examinations.

## GENERAL INFORMATION

**Suggestions to Prospective Students.** It would be to the advantage of students if they would matriculate, secure boarding places, and fulfill the entrance requirements, a few days in advance of the opening exercises, so that their studies may not be interrupted in the beginning of the college year.

**Board and Lodging.** Good board and lodging vary in prices from five to seven dollars per week. Furnished rooms, accommodating two students, cost from eight to twelve dollars per month. By forming boarding clubs, students may reduce the cost of board very considerably.

A list of desirable rooms and boarding places may be obtained by addressing the Young Men's and Young Women's Christian Association of Los Angeles or by inquiring at the offices of these organizations of the University in the College of Liberal Arts.

**Employment.** The course of lectures has been so arranged as to permit those who desire it to devote a portion of their time to employment. The Secretary will keep a register of students seeking such employment, and will give every assistance possible in procuring it for them.

**Discipline and Good Order.** All students are expected to observe the principles of good conduct and order while attending the College, and plain infractions of the rules will be referred to the Executive Committee of the Faculty, with recommendation of reprimand, suspension, or expulsion.

**Athletics.** The Faculty encourages athletic sports for their value in developing the body, in furnishing a means of pleasant recreation and a source of social and ethical culture, and in cultivating the spirit of co-operative enterprise. One of the finest athletic fields in Southern California is on the campus, as well as a gymnasium completely equipped; while the mammoth athletic field at Exposition Park is but a short distance away and is open to the use of University students. Students in good standing in the College of Pharmacy are eligible to places on the football, baseball, and track teams of the University.

**Correspondence.** Address all inquiries and other communications to

THE COLLEGE OF PHARMACY,  
Thirty-fifth Street and University Avenue,  
Los Angeles

# THE COLLEGE OF ORATORY

The system used in the College of Oratory is based upon the Cumnock Method, founded by Robert McLean Cumnock, L.H.D., Director of the School of Oratory, Northwestern University, Evanston, Illinois.

The aims of the College are: 1. To develop the inner self. To prepare the body to express the inner self. The method is neither imitative nor mechanical, but is founded upon psychological principles. The pupil acquires the power to interpret for himself and to express emotions through his own individuality. The result is naturalness and simplicity of manner, together with personal power.

A great deal of attention is paid to the Department of Public Speaking. Ministers, theological students, or any who may have occasion to address audiences, will find this work of great value.

The Calendar of the College of Oratory is the same as that of the College of Liberal Arts.

## Credit in the College of Liberal Arts

A student in the College of Liberal Arts may elect a maximum of fifteen hours in the College of Oratory. (See Liberal Arts.)

## Courses of Instruction

### CLASS WORK

**Course I. Fundamental Principles:** Diction; consideration of the technique of intelligent reading; enlargement of vocabulary; correction of mannerisms. Two hours, both semesters.

**Course II. Voice Building:** Relaxation, breathing, tone placement, resonance, rhythm, phrasing, melody; development of purity, strength, quality and control of tone. Two hours, both semesters.

**Course III. Advanced Voice:** The continuation of the technique of voice building with an application to interpretation. (Open to Seniors only.) Two hours, both semesters.

**Course IV. Speech and Action:** The course is given to stimulate the imagination, and to establish responsive action of the body as the natural result of thought. One hour, both semesters.

**Course V. Aesthetic Technique:** Establishment of poise, strength, control, lightness, plasticity and relaxation of the body. Chalif's "Technique of Classical Exercises" is made the fundamental in the work. One hour, both semesters.

**Course VI. Normal Training:** Discussion of the methods and problems of teaching oral English and Interpretation. Preparation and presentation of model lessons, departmental organization, arrangement of curriculum. (Open to Seniors only.) One hour, both semesters.

**Course VII. Public Speaking:** A study of preparation for speech-making, the ends, the forms of support, and the choice of material. Practice in making extemporaneous speeches in class. Criticism of speeches in class and public meetings. Two hours, both semesters.

**Course VIII. Debating and Argumentation.** Methods of handling evidence, making briefs, and delivering debates; the science of argumentation. Course VII is advised as a prerequisite. Two hours, both semesters.

**Course IX. Repertoire:** Abridgment of the short story, the poem, the novel and the drama, for public presentation. One hour, both semesters.

**Course X. Modern Poets and Prose Writers:** The purpose of this course is to become acquainted with the writers of the day by the way of interpretation, not by dissection. A comprehensive survey is made of the life, writings, and style of each writer. Two hours, both semesters.

**Course XI. Shakespeare:** The history, philosophy and construction of the plays are considered, with reference to oral interpretation. Two hours, both semesters.

**Course XII. Story-Telling:** Analysis and classification of typical stories in literature and history, with actual practice in story-telling. The work is designed to meet the needs of student, teacher, librarian and mother. One hour, both semesters.

**Course XIII. Art of Interpretation:** An assembly of students for the discussion of the art principles involved in the public presentation of Literature.

- a. A general survey of the various forms of literature.
- b. The classic poets.
- c. Bible and hymn reading.
- d. Modern drama.

Two hours, both semesters for two years.

**Course XIV. Dramatic Club:** Interpretation and presentation of the drama; practical instruction in staging plays; a study of dramatic law. Two hours, both semesters.

**Individual Instruction:** Every pupil registered for the Full Course in Expression receives Thirty-two Private Lessons in Reading during the year, without extra charge, in addition to the class work. All private work is taken with the regular teaching staff.

## CONDITIONS OF ADMISSION

A student upon entering the Diploma Course must be a graduate of an accredited high school or academy.

Entrance to the Special Course does not require one to be a graduate of any school, but the work is planned to meet the needs of those who wish to complete a prescribed course in Expression.



## REQUIREMENTS FOR GRADUATION

**Diploma Course:** The work required in this course consists of: Three years of private work, one lesson per week; completion of all of the courses; one year advanced Physical Training; and sixty units of work completed in the College of Liberal Arts, such work to be approved by the Faculty of the College of Oratory.

**Special Course:** The College of Oratory will grant a Certificate of Expression upon the completion of two years of private work, one lesson per week; courses 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12 13 14; one year of Gymnasium work; two years of English; and one year of History.

## RECITALS

Pupils' recitals are given every week on Tuesday at 3:00 p. m. at Athena Literary Hall. The participation in these recitals by students is required that the student may have practice and gain confidence in appearing before audiences. All students enrolled in the school are expected to be present at each recital.

## PHYSICAL EXPRESSION

"Is not that the best education which gives to the mind and to the body all the force, all the beauty and all the perfection of which they are capable?"—Plato.

Special classes in Physical Culture are conducted for the Oratory students. The laws which underlie Physical Expression are here studied and such exercises are given as will best develop the pupil toward health, expressiveness of movement and grace. It is the aim of this work to bring the body under perfect control of the will, and to teach the principles of gesture in such a manner as to give spontaneity and freedom from affectation.

## SUMMER SESSION

The College of Oratory offers both private and class work during the summer session of six weeks. The work completed will be given credit in the College of Oratory, and also in the accredited courses of the College of Liberal Arts and College of Law.

## SATURDAY INSTRUCTION

Special classes offered Saturday morning by the College of Oratory are planned to meet the needs of teachers particularly. Courses in the Art of Speech and Diction, Public Speaking, and Story-Telling, will be offered and credit given in the College of Liberal Arts for work completed.

Individual instruction also is offered for those desiring the work.

## FEES AND EXPENSES

(Fees are payable at the Office of College of Oratory)

Class Instruction, per semester (18 weeks)

Private Instruction, per semester (16 weeks)

Delinquent payments involve an increase of ten per cent in tuition.

**Full Course**, including one private lesson per week, four or more classes in Expression, one study in the High School or in the College of Liberal Arts, and one year of Gymnasium.

Registration fee, per semester (not refundable).....	\$ 3.00
Full course, per semester.....	75.00
Two private lessons per week (30 minutes).....	60.00
One private lesson per week (30 minutes).....	32.00
A course of ten lessons (30 minutes).....	20.00
One private lesson per week (45 minutes).....	45.00
A course of ten lessons (45 minutes).....	28.50
Single lessons .....	\$1.50 to 3.50
Class, two periods per week (55 minutes).....	10.00

Coaching Plays (60 minutes).....	3.50
Coaching Debate (60 minutes).....	5.00
Special rates given to students entering University contests.	
Diploma fee .....	\$10.00
Certificate fee .....	5.00

A discount of ten per cent on all private work will be given to ministers and deaconesses.

Send for a catalogue of the College of Oratory. Address

BEULAH WRIGHT, Dean,  
The College of Oratory,  
University of Southern California,  
Thirty-fifth Street and University Avenue,  
Los Angeles

# THE COLLEGE OF MUSIC

The College of Music of the University will begin its thirty-second year on September 11, 1916. By a faithful maintenance of high standards its faculty have brought it to a well recognized position in higher musical education. Its diplomas have all the prestige which comes from its long establishment and from the name of the University. Its graduates and former students are taking prominent places in the musical world all over the Southwest, both as teachers and as performers.

Extended courses are offered in a wide range of musical subjects. The end sought in every branch pursued by the student is such thoroughness as will give him a genuine accomplishment and true culture, or insure him the mastery expected of a professional.

## ADVANTAGES OF COLLEGE STUDY

The general spirit of earnest study characteristic of an institution of higher learning such as the University, has been found to react very beneficially on the student of music, who, too often, is inclined to superficiality. Breadth of character and liberality of ideas are more surely attained in the atmosphere of general education than in that of specialized study.

Among the advantages of pursuing the study of music in an institution of collegiate rank and methods there may be mentioned the requirement of regular attendance at lessons; the creation of a musical atmosphere by the recitals, lectures, and class work; the incentive to greater effort by observing the proficiency of others; the sharpening of the critical faculties and the development of taste by listening to the performance of other students; and the opportunity given for obtaining in class work, at very slight expense, the very best of training in the theoretical studies, such as harmony, theory, and the history of music—studies that are essential to the well-grounded musician and that the private teacher can not touch upon in the lesson hour.

## RECITALS

A feature of the greatest value to the students is the regular pupils' recitals, at which the pupils are expected to play or sing before the whole school, as their teachers may direct. Public performance is an art in itself, and can only be mastered by many public appearances. Pupils who acquit themselves creditably at the recitals before the music students only, are allowed to appear at the public recitals of the school. A practical familiarity is thus gained with the music of the other branches represented outside of the student's specialty. In addition, recitals are given from time to time by the faculty, who are also frequently heard in the recitals given by the advanced pupils. Music students have free admission to all public exercises of the school.

## NORMAL TRAINING CLASS FOR PIANO TEACHERS

This course provides a systematized, tabulated outline for ready reference and help to further study. It is not a method—rather a concise classification of the essentials for piano study, together with a carefully selected list of teaching materials and reference books.

The course includes such subjects as The Teacher's preparation and equipment; Types of pupils and how to meet them; The first lesson and suggested order of progression of study; Outline of technic with special exercises for hand development and correction; Discussion of the principles of Rhythm, Phrasing, Accent, Fingering, Melody Playing, Sight Reading, Ear Training, Practicing, Memorizing, the Pedal.

## THE COURSE OF STUDY

The educational system of the school is divided into two general departments: the Preparatory and the Normal or Collegiate.

No requirements are made for admission, but applicants should be prepared to perform one or two musical selections of different styles representative of their previous work.



All beginners are received in the Preparatory department, whether they plan for the regular advanced courses or merely desire the best of training during the time they devote to the study. Correct elementary teaching is the most important and, in some respects, the most difficult of all musical instruction. It is the aim of the school to advance pupils as rapidly as is consistent with thoroughness and the formation of correct habits.

The Normal or Collegiate department is designed for students preparing for the profession as teachers and artists, and for amateurs desirous of obtaining a thorough training in the art and science of music.

### DIPLOMAS

The diploma of the University is given at the completion of the Normal or Collegiate course. The requirements for graduation in any department are:

- (1) Graduation from High School or its equivalent.
- (2) The completion of the prescribed course in the department chosen, at least one year's work in which must have been done in this school.
- (3) The completion of the following theoretical course: Ear Training, one semester; Harmony, three semesters; Counterpoint, one semester; Theory, two semesters; History, two semesters.
- (4) The public performance during the Senior year of an entire program under the direction of the department teacher.
- (5) For piano students, the normal training class, two semesters for organ students, a semester of "keyboard harmony"; and for vocal students, one year of piano work.

### TEACHERS' CERTIFICATES

Teachers' Certificates will be given to those who have completed the work of the Normal course and of the Normal Training class, but who for any reason are unable to give the public recital required for graduation. They will, however, be required to give before the faculty a program of a somewhat less exacting nature than that required for the diploma.

## CREDITS IN THE COLLEGE OF LIBERAL ARTS

To students who have met the full college-entrance requirements, credits will be given in the College of Liberal Arts for musical work as follows: Two semester units will be credited to students making a passing grade in any one of the theoretical studies or in advanced vocal or instrumental work, the total number of credits in the College of Music thus granted not, in any case, to exceed fifteen of the entire 120 units required for the degree of Bachelor of Arts.

## BUSINESS REGULATIONS

The work of the academic year is divided into four ten-week terms, beginning respectively on September 11 and November 20, 1915, and February 5 and April 16, 1917; the last term to end on June 23. Students entering after the opening of the term will register for the remaining portion and will be charged pro rata, except that no reduction will be made for absence from the first two lessons. Students who enter late will find themselves behind their classes.

All students are required to attend the regular recitals of the school and to take part in them whenever so assigned.

No deduction will be made for occasional absence from lessons or for lessons discontinued without notice. Lessons missed will be made up to pupils, if notice of the intended absence is given two days in advance.

Lessons falling on national holidays are not lost to students.

Sheet music will be furnished students at teachers' rates, if paid for on delivery.

Settle all accounts at the office only, making checks payable to **The Dean**.

**Terms:** Tuition is payable strictly in advance at the beginning of each term.

In case an extension of time is absolutely necessary, arrangements must be made with the Secretary, the terms to be stated on the bill and strictly adhered to.

For courses of study and further particulars, send for special booklet.

## FEEES AND EXPENSES

### Total Expenses by the Ten-Week Term

(Four terms per year)

#### Piano or Organ—Mr. Skeele.

45 minutes, one a week, \$25.00; twice a week, \$50.00.

30 minutes, once a week, \$20.00; twice a week, \$40.00.

#### Piano—Miss Trowbridge.

45 minutes, once a week, \$20.00; twice a week, \$40.00.

30 minutes, once a week, \$17.50; twice a week, \$35.00.

#### Classes in Ensemble

Piano Normal—Miss Trowbridge.

45 minutes, class, twice a week, \$8.00.

Interpretation class, once a week, \$4.00.

#### Piano—Miss Davidson.

30 minutes, once a week, \$12.50; twice a week, \$25.00.

45 minutes, once a week, \$15.00; twice a week, \$30.00.

#### Theory, Harmony, or History—Mr. Pemberton.

45 minutes, once a week, \$15.00; twice a week, \$30.00.

45 minutes, class, twice a week, \$8.00.

#### Violin—Mr. Pemberton.

1 hour, once a week, \$25.00; twice a week, \$50.00.

#### Violin—Mr. Perry.

30 minutes, once a week, \$20.00; twice a week, \$40.00.

1 hour, once a week, \$30.00; twice a week, \$60.00.

#### Vocal—Mrs. Robbins or Mr. Cogswell.

30 minutes, once a week, \$35.00; twice a week, \$60.00.

#### Vocal—Mrs. Sanger.

30 minutes, once a week, \$15.00; twice a week, \$30.00.

#### Vocal—Miss Backstrand.

30 minutes, once a week, \$15.00, twice a week, \$30.00.

Rental of Pipe Organ, one hour each day, \$12.00.

Diploma Fee, \$10.00. Certificate Fee, \$10.00.

For further information address

THE COLLEGE OF MUSIC,

University of Southern California,

400 Mason Opera House Building, Los Angeles.

# THE COLLEGE OF FINE ARTS

There are still, and always will be, great opportunities for those who are well qualified as art teachers, painters, architects, sculptors, designers and artisans, and every ambitious student owes it to himself to get the best.

The purpose of a student in any branch of art is to acquire an understanding of beauty, an eye for form, a love and knowledge of color, a dexterity of hand and a logical technic, but success in life demands also industry, tenacity, self control, sincerity, co-operation and courtesy, and these things mean character.

The influences of college life in character building are often the factors on which success in life depends, therefore it becomes of great importance in selecting a school to discover where these advantages may best be obtained.

## LOCATION AND EQUIPMENT

The special advantages of this school are many. The College of Fine Arts of the University of Southern California is situated on a cliff overlooking an unspoiled natural park, the famed Arroyo Seco, with a perennial stream and groves of magnificent trees, rocky cliffs and acres of boulders, wide stretches of oak-dotted sward, and the eternal snow-capped mountains closing every vista. Near at hand are mountain canyons, sandy beaches, rocky promontories, and an unparalleled variety of race and costume for models. Probably no spot in the world of the same area offers more variety or greater abundance of paintable material, and the ideal climate permits of outdoor work almost continuously.

The buildings are handsome and commodious. There are nine large, well-lighted, and well-ventilated studios; a picture gallery; an assembly room with piano; a reception room; cloak room; and dormitories with every possible convenience. Every room is perfectly finished for its purpose. There is an abundant equipment of sculpture, casts, designs in architec-



ture, pottery, metal, jewelery, etc. The library contains all the standard art magazines and many volumes upon art studies. There are also ample grounds for recreation and outdoor study.

The curriculum embraces every department of graphic and plastic art that can be learned from teachers or books. This fullness of curriculum and the constant supervision of each department of work by expert teachers, giving instruction that is largely individual, insure that the student will have a thorough grounding in the fundamental principles of art, and that the graduate will know all that an intelligent and cultured artist or teacher should know. Further, the concentrating of the third year's work on the chosen specialty makes certain that the student will leave the college well equipped to enter the ranks of workers.

## MATRICULATION

**Entrance requirements for the Teachers' Course and the courses leading to degrees:** Fifteen units of high-school work, uniform with requirements for admission to the College of Liberal Arts.\*

**Advanced Standing:** Credits for work done in other art schools will be allowed when satisfactory proficiency is shown, but for the courses above specified the entrance requirements must be fully complied with.

**Special Students** may register for special branches to be taken separately. In such cases certificates of proficiency are granted on the student's passing the required examinations. Students in several branches may enter the school at any time without examination.

---

\*See pages 41-54.



**PAINTERS' COURSE (Four Years)**  
(Leading to the degree of Bachelor of Fine Arts)

**First Year.** Charcoal drawing from the cast; clay modeling; pencil drawing from landscape; mechanical drawing, including geometry, perspective, and projection; art history and mythology.

**Second Year.** Composition and drawing from life of draped and nude figure, portraiture, landscape; anatomy, modeling; water color; art history, sacred history; German or French.

**Third Year.** Painting in water color and oil from life and landscape; pen and wash drawing; composition; modeling; design; normal teaching course; German or French.

**Fourth Year.** Specializing in the chosen line in painting, sculpture.

**TEACHERS' COURSE (Three Years)**

**First Year.** Charcoal drawing from the cast; clay modeling, pencil drawing from landscape; mechanical drawing, including geometry, perspective and projection, art history and mythology.

**Second Year.** Drawing from life, portrait, draped and nude figure; composition; landscape; modeling; applied design; anatomy; water color; art history; sacred history; pottery; wood carving and metal work.

**Third Year.** Painting in water color and oil from life and landscape; pen and wash drawing; composition; modeling; anatomy; design and normal teaching course.

**ARCHITECTURAL COURSE (Four Years)**

**First Year.** Mathematics; freehand drawing; mechanical drawing; design; outdoor sketching; art history; mythology.

**Second Year.** Life; water color; clay modeling; civil engineering.

**Third Year.** Architectural drawing; historic styles; history of architecture; graphic statics; heating and ventilating; anatomy; structural design.

**Fourth Year.** Plan drawing; original design; applied perspective; practical work on buildings under construction and landscape gardening.

**ILLUSTRATING COURSE (Three Years)**  
(Leading to a Diploma)

**First and Second Years.** As in painters' course.

**Third Year.** Painting in water and oil, pen and wash drawing, caricature, cartooning, and composition.

**DESIGN COURSE (Three Years)**  
(Leading to a Diploma)

**First Year.** Freehand and mechanical drawing, original design, art history.

**Second Year.** Composition, color harmony, original design, anatomy.

**Third Year.** Historic ornament, fabrics, interior decorating, applied design.

**SCULPTURE (Three Years)**  
(Leading to a Diploma)

**First Year.** As in teachers' course.

**Second Year.** Modeling from life, draped and nude; portraiture; anatomy; mythology; the history of art.

**Third Year.** Composition and grouping; modeling from life; casting in plaster and metal; anatomy; historic monuments.

**SPECIAL BRANCHES**

**The Painting Course:** This course includes drawing; color, harmony and composition; technic in water and oil; anatomy; the chemistry of pigments.

**Artistic Anatomy:** This course includes study of the skeleton and the superficial muscles, and of movements from life.

**Normal Art Course:** This course includes pedagogy and practical work in all the art branches taught in grade schools, as object drawing in pencil, charcoal, and wash, silhouettes, stenciling, cardboard modeling, colored chalks, harmony, design, etc.

**Metal Work—Brass and Iron:** This course includes hammer work, etching, chasing, piercing, mould making, casting, forging and enameling.

**Jewelry:** This course includes wire and band work, casting, chasing, jewel setting, enameling and design.

**Wood Carving:** This course includes design, the selection of woods, and the technic of carving, incising, bas-relief, and the round.

**Pottery:** This course includes clay modeling, the potter's wheel, moulding, glazing, firing, underglaze painting, harmony, and design.

**Mural Painting:** This course includes drawing, water color and oil painting, color harmony, composition, and practical application.

**Interior Decorating:** This course includes drawing, design, color harmony, composition and the nature and uses of materials.

**Art Glass:** This includes design, hard-metal mounting, leading, cutting, color harmony, painting on glass, and firing.

**SUMMER SCHOOL**

A summer school is maintained, beginning about July 1 of each year.

All branches of fine and applied art are taught, the fees being about the same per month as in the full course.

Special circulars will be mailed on application.

## PRIZES

A gold medal is awarded to the student making the best record.

A scholarship for one year is awarded to the member of the graduating class making the best record.

## FEES AND EXPENSES

(All-day lessons; hours, 9 a.m. to 12 m.; 1 p.m. to 4 p.m.)

Full Collegiate Year.....	\$100.00
Collegiate Semester .....	55.00
Per month, six days per week.....	15.00
Per month, three days per week.....	8.00
Per month, one day per week.....	4.50
Single lessons, each.....	2.00
Laboratory Fee for Crafts, per term.....	1.00
Graduation Fee .....	5.00

All fees are payable in advance.

## REMARKS

There are three lectures per week on anatomy and other art subjects free to all enrolled students, with occasional lectures by noted teachers and artists.

No charge is made for models, lockers, boards, easels, etc.

Materials are furnished to students at the lowest rates.

The school dormitories are equipped with every comfort and convenience, including facilities for light housekeeping.

Board and lodging may be had near the school at reasonable rates.

For further information address

THE COLLEGE OF FINE ARTS

200 Avenue 66, Los Angeles

# THE UNIVERSITY HIGH SCHOOL

A preparatory school for a limited number of students is maintained in connection with the Department of Education in the College of Liberal Arts. Four four-year courses are offered, each giving a thorough preparation for entrance to college, and leading to a diploma of graduation.

The instruction in the various courses is given by a distinct faculty of competent instructors, who teach under the supervision of the major professors of the College of Liberal Arts, and others of long teaching experience. Each instructor holds the degree of Bachelor of Arts and has spent at least one semester in graduate work as a special preparation for the profession of teaching.

An exceptional feature of the instruction given in the High School is the opportunity for individual students to receive personal attention from their instructors. This is made possible by limiting the number of students to 150. A class of moderate size is given to each instructor, who devotes himself to the presentation of the one academic subject in which he is specializing.

Students in the High School enjoy all the general advantages open to the students in the College of Liberal Arts, including the library, lectures, laboratories, and religious and social privileges.

## CONDITIONS OF ADMISSION

Applicants must have finished work equivalent to that required for admission to any regular state high school. They must show evidence of fitness to begin the work of the classes in the school. Persons who wish to take a partial course, or to choose their own studies, may enter the High School without a formal examination, and pursue such subjects as they may be prepared to take.



### **Application for Admission**

The registrar upon request will furnish prospective students with application blanks. These, when properly filled out and returned to the registrar's office, will be filed in the order in which they are received, the postmark being taken as the date of application. Since the enrollment of students in the High School will be limited to 150, applications for admission received after this number has been reached will be placed on the waiting-list.

Each applicant whose name has been entered on the waiting-list will be notified immediately of the number of his place; and, should any vacancy occur before instruction begins, notice to that effect will be sent to each one on the waiting-list in the order of application.

### **REGISTRATION**

On or before the appointed registration days in September and February, each student must register at the office of the principal. After consultation with representatives of the registration committee concerning courses of study, each student will receive a study-card and an enrollment-card, upon which will be entered the subjects desired for the semester. The study card will be for the guidance of the student. The enrollment card must be filed with the Treasurer of the University when registration fee is paid.

### **COURSES OF STUDY**

The principal or vice-principal will endeavor to organize for each student a definite four-year course of study suited to the needs and aims of the individual student. Four suggested courses are outlined on page 332.

### **REPORTS AND GRADES**

During each semester at least three special reports of standing will be sent to the parent or guardian of each student, and at the end of each semester a final report of standing covering the entire semester's work.

## SUGGESTED COURSES OF STUDY

MODERN LANGUAGE	LATIN-ENGLISH	CLASSICAL	SCIENTIFIC AND ENGINEERING
<b>First Year</b> English Oral English Algebra Ancient History Spanish	<b>First Year</b> English Oral English Algebra Ancient History Latin	<b>First Year</b> English Oral English Algebra Ancient History Latin	<b>First Year</b> English Oral English Algebra Ancient History German
<b>Second Year</b> Med. & Mod. History Botany or Zoology English Spanish	<b>Second Year</b> Med. & Mod. History Botany or Zoology English Latin	<b>Second Year</b> Med. & Mod. History Botany or Zoology English Latin	<b>Second Year</b> Advanced Algebra Botany or Zoology English German
<b>Third Year</b> English Geometry German Chemistry or English History or Industrial History and Com- mercial Geography	<b>Third Year</b> English Geometry Latin Chemistry or English History or Industrial History and Com- mercial Geography	<b>Third Year</b> English Geometry Latin Greek	<b>Third Year</b> English Geometry F. H. Drawing Chemistry
<b>Fourth Year</b> U. S. History and Civics English German Physics or Economics and Sociology	<b>Fourth Year</b> U. S. History and Civics English Latin Physics or Economics and Sociology	<b>Fourth Year</b> U. S. History and Civics Latin Greek Physics	<b>Fourth Year</b> U. S. History and Civics Mechanical Drawing Physics Trigonometry Solid Geometry and

Grade A denotes the highest excellence; grades B and C rank in a descending scale of merit. A student is passed for graduation in a given subject if his grade in that subject is C, or above. However, a student is not recommended to college in a given subject if his grade in that subject falls below B.

Grade F signifies failure to pass. If a subject is reported "Conditioned" or "Reserved," delinquencies in that subject are to be made up in such manner as the instructor may determine.

## GRADUATION AND DIPLOMAS

A diploma of graduation will be granted to each student who completes fifteen units of the courses described on the following pages; provided, that the fifteen units be made up as follows:

English .....	2 units*
A Foreign Language.....	2 units
A Laboratory Science.....	1 unit
Algebra and Plane Geometry.....	2 units
United States History and Civics.....	1 unit
Electives .....	7 units

and provided that the student has been in attendance at the University High School for at least two semesters preceding the completion of the work described above.

The University High School has a special evening set aside in commencement week for its graduation exercises.

## ASSEMBLY

Assembly for all students enrolled in the High School is held at the 11:40 period on Monday, Wednesday and Friday of each week.

---

\*The term "unit" is here used to denote a preparatory subject studied through one school year with five class exercises (or the equivalent) per week.

# SCHEDULE OF CLASSES, 1915-16

Hour	First Year	Second Year	Third Year	Fourth Year
8:00		Adv. Algebra		Solid Geom., M.W.F. Trigonometry, M.W.F.
8:55	English		English	U. S. History Civics
9:50		Mediaeval History Modern History	Plane Geometry	
10:45	Algebra	Botany Zoology	English History	English
11:40	Assembly, M.W.F. Oral English, T.Th.	Assembly, M.W.F. Botany, T.Th. Zoology, T.Th.	Assembly, M.W.F.	Assembly, M.W.F.
1:15	French German Latin Spanish	English	Chemistry	Physics
2:10	Ancient History	French German Latin Spanish	Chemistry, F. Industrial History Commercial Geography Latin	Physics, W. Economics Sociology
3:05	Gymnasium	Gymnasium	Gymnasium	Gymnasium

Note: Hours for Freehand Drawing and Mechanical Drawing arranged.

## **ATTENDANCE**

Attendance upon all class, laboratory, study, and assembly periods indicated on the study card is required.

## **LITERARY SOCIETIES**

The Atheneum Society is composed of young men who meet each week for training in public speaking.

The Willard Literary Society is composed of young women who meet each week for training in literary work.

## **ROOMS AND BOARD**

Students are required to submit to the Faculty a statement of the places where they desire to room and board, and must secure the consent of the Faculty in each case.

Board and furnished rooms can be secured in private families at from five dollars to seven dollars a week. Furnished rooms accommodating two students cost from eight to twelve dollars a month.

Other expenses incident to school life vary with the habits and circumstances of the student. They are not, of necessity, so great as to be burdensome to persons in moderate circumstances. The instances have been extremely rare in which students of good ability and health have been compelled to leave the school for want of money.

## **GENERAL INFORMATION**

For general information concerning the location of the school, the religious privileges, the library and reading room, the museum and the science laboratories, athletics and the gymnasium, see under College of Liberal Arts.



**FEES AND EXPENSES**

Registration Fee, a year, payable in advance.....	\$10.00
(The registration fee is not refundable.)	
Diploma Fee, payable 30 days before graduation.....	5.00
Laboratory Fees, a semester:	
Biology (each course requiring laboratory work).....	4.00
Chemistry .....	5.00
Physics .....	4.00

Students in Chemistry will deposit a breakage fee of \$5.00 which, after deducting the cost of goods broken, will be refunded at the close of the year.

Room and board (except luncheon Monday to Friday) in the Women's Hall, one hundred and seven dollars (\$107.00) a semester, payable in advance. A cash deposit of five dollars (\$5.00) is required for the reservation of a room. Pupils are expected to furnish their own bed-linen.

**DEPARTMENTS OF INSTRUCTION****BIOLOGY**

The courses in biology are intended primarily for students in the second year.

**Second Year. Botany.** An elementary study of plant life. The work in Botany is a combination of laboratory study, lectures, and recitations, with a careful notebook record of the work actually done by the student under the direction of the instructor. Text: Andrews' "Practical Course in Botany."

**Second Year. Zoology.** An elementary study of animal life. This work is a combination of laboratory study, lectures, occasional field trips, and recitations, with a careful notebook record of the work done by the student under the direction of the instructor. Texts: Linville and Kelley's "Text-Book of General Zoology"; Linville and Kelly's "A Guide for Laboratory and Field Work in Zoology."

## CHEMISTRY

**Third Year. Elementary Chemistry.** A study of the general principles, theoretical and practical, of inorganic chemistry. Recitations and individual laboratory work occupy not fewer than seven hours a week. The student is required to keep a complete record of the work done during the year. Texts: McPherson and Henderson's "First Course in Chemistry"; McPherson and Henderson's "Laboratory Exercises—Arranged to Accompany 'First Course.'"

## DRAWING

**Freehand Drawing. First Semester.** Elementary work from geometric solids and casts. A complete course giving one-half unit of credit. **Second Semester.** Advanced work in charcoal from casts and still life; flat wash in black and color. A complete course giving one-half unit of credit.

**Mechanical Drawing. First Semester.** Linear drawing; simple geometric problems; lettering. **Second semester.** Advanced geometric drawing; conic sections; projections.

## ECONOMICS AND SOCIOLOGY

The courses outlined below are open to third and fourth year students only.

**Third Year. First Semester. Industrial History.** A study of the industrial history of the American people. This course includes such topics as General and Special Industries, Commerce and Money, Manufacturing, and Transportation. Text: Moore's "Industrial History of the American People."

**Second Semester... Commercial Geography.** An elementary study of commercial conditions, topographic, climatic, etc., and a brief survey of the important commercial countries. Text: Adams' "A Commercial Geography."

**Fourth Year. First Semester. Economics.** This course includes such topics as Production, Consumption, Distribu-

tion of Wealth, the Theory of Exchange, Money and Credit, Monopolies, International Trade, and Governmental Revenues and Expenditures. Text: Bullock's "Introduction to the Study of Economics." **Second Semester. ..Sociology.** An introduction to the study of Sociology. A study of concrete sociological conditions with some attention to sociological theories. Text: Ellwood's "Sociology and Modern Social Problems."

## ENGLISH

The program for the study of the four-year course in English involves, among other important items, the following list of particulars:

### Language

Special emphasis on oral expression, spelling, grammar, and the writing of themes.

Formal analysis of sentences and paragraphs.

Practice in the construction of typical sentences and paragraphs.

The correlation in long themes of the four conventional forms of discourse, and the differentiation in the statement of a general subject, the thesis, and the title.

The principle of comparison as the basis for examples, illustrations, simple predications, and figures of speech.

Actual practice in the organization and conduct of debating societies as a specific motive for effort in independent opinion and extemporaneous expression.

### Literature

The following literary masterpieces for reading or intensive study include prose fiction, biography, ancient classics in translation, essays, drama, orations and arguments, selections from American and English poetry. In class discussion stress is laid upon the thought and emotional content, with some attention to form and the aesthetical element.

**First Year. First Semester.** "American Stories"—The Hawthorne Classics; Scott's "The Lay of the Last Minstrel." **Second Semester.** "Old Testament Stories"; Tennyson's "Enoch Arden"; Defoe's "Robinson Crusoe," Part I.

**Second Year. First Semester.** Franklin's "Autobiography"; Sherman's "A Book of Short Stories"; Shakespeare's "Merchant of Venice." **Second Semester.** Law's "Selections From American Poetry"; Lincoln's "Inaugurals and Addresses"; Dana's "Two Years Before the Mast."

**Third Year. First Semester.** George Eliot's "Silas Marner"; Carlyle's "Essay on Burns"; Tennyson's "Idylls of the King," (three). **Second Semester.** Shakespeare's "Macbeth"; Fuess' "Selected Essays."

**Fourth Year. First Semester.** Smith's "Oral English for Secondary Schools"; Washington's "Farewell Address"; Webster's "First Bunker Hill Oration"; Webster's "Reply to Hayne." **Second Semester.** Syle's "Selections from English Poetry"; Shakespeare's "King John."

### Oral English

**First Year. First Semester.** Principles of voice building: breathing, relaxation, and tone placement. Phonetics. Enunciation. Beginning of common reading. **Second Semester.** Continuation of technique as in first semester. Interpretation of selections in "Cumnock Reader."

(Note: The course in First Year Oral English is required of all first year students.)

**Second Year. First Semester.** Continuation of technique and interpretative reading offered in First Year Oral English. Beginning of Extemporaneous speaking: narrative, descriptive, and biographical. Text: Cumnock's "Choice Readings." **Second Semester.** Talks on current public questions. Beginning of argumentation in extemporaneous speaking and debating.

## ENGLISH BIBLE

Courses in English Bible may be elected by second, third, or fourth year students. One-half unit of credit is given for each course.

**Old Testament.** A course dealing with the sources, form, and materials of the Old Testament, with especial emphasis on the historical phases. The unique mission of the prophets is also carefully considered. It is the object of this course to open up the Bible in a new way and make it a living reality.

**New Testament.** The object of this course is to present the lives of the two greatest personages in human history, Jesus and Paul, in such a way that not only may the historical data be grasped, but a new inspiration be received from contact with such men. The early Apostolic Church and its place in the Divine plan are also carefully examined.

## FRENCH

**First Year.** This course comprises a study of the essentials of French grammar, and reading from easy French, with especial attention given to pronunciation and to the use of simple, conversational phrases. Texts: Fraser and Squair's "Shorter French Course"; Francois' "Easy Standard French."

**Second Year.** This course includes a review and continuation of French grammar, with emphasis on the idiomatic usages of the language. Reading from various modern French authors is combined with composition and conversation. Texts: Labiche and Martin's "Voyage de M. Perichon"; Bruno's "Tour de la France"; Erckmann-Chatriau's "Mme. Therese" (Oxford Press); Daudet's "La Belle-Nivernaise"; Fraser and Squair's "Shorter French Course."

## GERMAN

**First Year.** The course in First Year German comprises studies in pronunciation, grammar, drill on the forms, ele-



mentary conversation, and various anecdotes and poems for translation and memorizing. Texts: Walter and Krause's "Beginner's German"; Walter and Krause's "First German Reader."

**Second Year.** The grammar is finished and reviewed. Various modern German stories and poems are read and reproduced, both orally and in the form of written exercises. The class work is conducted mainly in German, and the ability to read accurately and fluently and to express simple thoughts in spoken and written German is required. Texts: Walter and Krause's "Beginners' German"; Storm's "Im-mensee"; other modern German stories and poems.

## GREEK

Courses in Greek may be elected by second, third, or fourth year students.

Beginning classes in Greek are carried on in the College Department in which the work outlined below is covered in two years. High School students of the third or fourth year who show exceptional ability and strength in this subject are admitted to these College classes and are advised to avail themselves of this privilege. The same credit (three units) is given to High School students in these classes as is granted in the University High School for the three years' work.

**First Year.** The aim of the first year's work is to thoroughly acquaint the student with forms. Text: Benner and Smyth's "Beginners' Greek Book."

**Second Year.** During this year the first four books of Xenophon's "Anabasis" are translated. Daily practice is given in sight reading. There is regular practice in oral and written composition based on the text. The work is made the basis of a thorough drill in grammar. Texts: Goodwin and White's "Xenophon's Anabasis"; Pearson's "Greek Prose Composition"; Goodwin's "Greek Grammar."

**Third Year.** Books I-IV of Homer's "Iliad" are read and translated. Practice in sight reading is given daily from Books V and VI. Scansion, forms, syntax, and mythology are given special attention. Texts: Seymour's "Homer's Iliad"; Pearson's "Greek Prose Composition"; Goodwin's "Greek Grammar."

## HISTORY

In addition to the thorough study of the text-books, the work in History is supplemented by collateral reading and written reports on assigned topics. Practical use is made of the library reference books, atlases, and dictionaries. Map drawing and carefully kept note-books are required in all courses in this department.

**First Year. Ancient History.** Since Ancient History furnishes the student with the fundamental ideas for the proper understanding of additional historical study, it ought to be taken in the first or second year of his high school course.

**First Semester.** The Oriental Peoples and the Greeks.

**Second Semester.** The Romans and the Roman Empire through the reign of Constantine. Text: West's "The Ancient World."

**Second Year. Mediaeval and Modern History.** This course is open to all students who have completed Ancient History.

**First Semester.** From the "Dark Ages" to the "Discovery of America."

**Second Semester.** From the "Reformation" to the "Napoleonic Era." Text: Myer's "Mediaeval and Modern History."

**Third Year. English History.** This course is open to students registered in the third or fourth year.

**First Semester.** To "The Reign of Elizabeth."

**Second Semester.** From "The Reign of Elizabeth" to "The Growth of Democracy." Text: Cheney's "A Short History of England."

**Fourth Year. United States History and Civics.** Primarily for students registered in the fourth year.

**First Semester.** Six parts of the text completed: From the "Establishment of

the English" to "The Crisis of Disunion." Text: Muzzey's "American History." **Second Semester.** The text-book on civil government completed. Text: Forman's "The American Republic."

## LATIN

**First Year.** The aim of the first year's work is to attain an accurate pronunciation, a thorough knowledge of all the regular forms of declension and conjugation, together with the simpler principles of syntax, and a vocabulary of about eight hundred common words. Text: Smith's "Latin Lessons."

**Second Year.** Four books of Caesar's "Gallic War" are read. Regular forms are reviewed and essential irregular forms are learned in a systematic study of Latin grammar. There is regular practice in oral or written translation into Latin of exercises based on the text read, and sight translation is an important part of the year's work. Some attention is given to subject-matter. Text: Bennett's "Caesar's Gallic War."

**Third Year.** In the reading and the interpretation of six of Cicero's orations the time is equally divided between language and subject-matter. The grammar is thoroughly reviewed in regular oral or written composition based on the text. An attempt is made to gain a definite knowledge of Cicero and his age, of the Roman government in Cicero's time, and of the city of Rome. The simpler letters are read at sight. Texts: D'Ooge's "Select Orations of Cicero with Letters"; D'Ooge's "Latin Composition, Parts II and III."

**Fourth Year.** The first six books of Virgil's "Aeneid" are read and interpreted. A special effort is made to approach the work as poetry. Prosody, figures of speech, mythological references, and poetical constructions are studied. Metrical reading is insisted upon. Two days each week are occupied during the first semester in a review of syntax and in prose composition. Texts: Fairclough and Brown's "Virgil's Aeneid"; D'Ooge's "Latin Composition, Parts II and III."

**MATHEMATICS**

The aim of the course in Mathematics is to cultivate the habits of independent reasoning, of accuracy of work, and of precision and clearness in the statement of conclusions and of the reason upon which they depend. First in importance is the intellectual training that makes the mind a ready and keen tool; second, the orderly acquisition of facts. Absolute thoroughness and work that increases in amount and difficulty with the student's increasing capacity are required. The student's efficiency is measured by his power to do. Throughout the course written reviews and test examinations are frequent.

**Algebra**

**First Year. Elementary Algebra.** The object of the study is not only to acquire a knowledge of the subjects required for admission to the leading universities, but to secure the mental discipline for its own sake, and such a drill as looks to the use of the algebraic method in future study. Special emphasis is placed on factoring and on the solution of equations. Text: Wentworth's "New School Algebra."

**Second Year. Advanced Algebra.** Elementary Algebra is reviewed thoroughly. A careful study is made of the following subjects: Theory of Quadratics, Simultaneous Quadratics, Progressions, Mathematical Induction, Binomial Theorem for Positive Integral Exponents, Inequalities, Variables and Limits, Imaginary and Complex Numbers, Determinants, Theory of Equations, Solution of Higher Equations, Logarithms. Text: Schultze's "Advanced Algebra."

**Third Year. Plane Geometry.** Careful attention is given to construction, to clear and logical expression, and above all to the attainment of the power to do original work in geometry. The exercises of the text-book are supplemented by constant suggestions by the teacher for investigations. Text: Wentworth's "Plane Geometry."



**Fourth Year. First Semester. Solid Geometry.** A study of the fundamental propositions of the Euclidean geometry of space. Text: Wentworth's "Plane and Solid Geometry."

**Second Semester. Trigonometry.** Plane trigonometry and its applications, the trigonometry of the right spherical triangle, and logarithms. Text: Wentworth's "Plane and Spherical Trigonometry" (with tables).

## PHYSICS

**Fourth Year. Elementary Physics.** The course in Physics is designed to make the student familiar with the principal facts, laws, and theories of Physics. This is accomplished by the careful study of a text and by laboratory work. Texts: Carhart and Chute's "First Course in Physics"; Coleman's "Revised Laboratory Manual."

## PHYSICAL EDUCATION

**Systematic Class Work.** This consists of vigorous drill with dumbbells, clubs, bar-bells, etc., for the boys; for the girls, general development exercises in walking and running, simple free movements, recreative games, and out-door sports.

**Progressive graded work** on various pieces of gymnastic apparatus, mat work, and gymnastic games for the boys; free movements, relaxing exercises, mat work, walking drill, and dumbbells and games in the open air for the girls.

## SPANISH

**First Year.** The aim of the first year's work is to attain an accurate pronunciation, a knowledge of the fundamentals of Spanish grammar, and the ability to converse in simple Spanish. Texts: "Worman's First Spanish Reader"; Coester's "Spanish Grammar"; Harrison's "Elementary Spanish Reader."

**Second Year.** Advanced reading and short stories. Continuation of grammar and conversation. Texts: Hill's "Spanish Tales for Beginners"; Crawford's "Spanish Composition"; Coester's "Spanish Grammar."



# CATALOGUE OF STUDENTS

## THE COLLEGE OF LIBERAL ARTS

The names of students are followed by the designation of their several class (Sr., Senior; J., Junior; S., Sophomore; F., Freshman; Sp., Special; U., Unclassified); the letter A indicates that the student is a candidate for the degree of A.B.; the letter S. that he is a candidate for the degree of S.B.

Adams, Edith	F.,	A	Los Angeles
Adams, Egbert	U.,	A	Upland
Adams, Lyle Harmon	F.,	A	Los Angeles
Adkinson, Katherine Wiley	J.,	A	Los Angeles
Ahrens, Lyleworth	F.,	A	Los Angeles
Aid, Frank D.	J.,	A	Los Angeles
Ainley, Charles H., Jr.	S.,	A	Monrovia
Albert, Roberta Faythe	S.,	A	Los Angeles
Alexander, Evalyn V.	U.,	A	Los Angeles
Alexander, Willard Buell	F.,	A	Los Angeles
Allen, Eva Maria	Sp.,	—	Los Angeles
Allen, Maude La Verne	F.,	A	Fresno
Allen, Willis Warren	F.,	A	Los Angeles
Allin, Helena	J.,	A	Los Angeles
Allison, Newton Vincent	F.,	A	Long Beach
Ames, Edwin Neal	Sr.,	A	Pasadena
Ames, Ruth Ann	J.,	A	Pasadena
Amick, Myrtle Elizabeth	U.,	A	Los Angeles
Anderson, M. Anna	F.,	A	Aspen, Colorado
Andres, Stella Clare	J.,	A	Los Angeles
Arzner, Dorothy	F.,	A	Los Angeles
Ashmore, Grace Isabelle	Sr.,	A	Los Angeles
Ashton, Ethel	Sp.,	—	Los Angeles
Austin, Daisy Morgan	Sr.,	A	Hollywood
Bailie, Ruth Morris	F.,	A	Los Angeles
Baker, Agnes Kingman	U.,	A	Los Angeles
Baker, Isabelle	U.,	A	Los Angeles

Ball, Esther Elizabeth	Sr.,	A	Gardena
Barbour, Katherine D.	Sp.,	—	Los Angeles
Barker, Eula Mary	S.,	A	Alhambra
Barlow, Genevieve	S.,	A	Gardena
Barnes, Jessie B.	J.,	A	Long Beach
Barsam, Barsam Harry	F.,	A	Fresno
Barton, Ralph Edward	S.,	A	Santa Monica
Bateman, Florence Mae	J.,	A	Los Angeles
Beazley, Raymond Roscoe	F.,	A	Buena Park
Beckett, Theresa	Sp.,	—	Pasadena
Beets, Teresa	Sp.,	—	Saramento
Behymer, Elsie Olive	Sp.,	—	Los Angeles
Benson, Charles	Sr.,	A	Los Angeles
Berner, Leo De Witte	S.,	A	Azusa
Berry, Abbie	S.,	A	Los Angeles
Berry, Fred M.	Sp.,	—	El Centro
Bertrand, Mrs. Mary E. C.	Sp.,	—	Los Angeles
Bettin, Vernon Alfred	S.,	A	Los Angeles
Betts, D. Ethel	U.,	A	Los Angeles
Beveridge, Francis Edwards	F.,	A	Los Angeles
Bidwell, Hastings Albert	F.,	A	Glendale
Bissiro, Attilio Albino	Sr.,	A	Los Angeles
Blackley, Aloysius B. C.	J.,	A	San Francisco
Blackmer, Harriet Abbie	Sp.,	—	Los Angeles
Blakemore, Edith E.	Sp.,	—	Pomona
Blalock, Eugene Uel	Sr.,	A	Porterville
Bland, Adelina	U.,	A	Los Angeles
Bland, Harriet Maud	Sp.,	—	Los Angeles
Bliss, Anna	U.,	A	Los Angeles
Blodgett, Mary Ladeveze	F.,	A	Los Angeles
Bloom, Mrs. Selma T.	Sp.,	—	Los Angeles
Bloomfield, Leonora G.	J.,	A	Los Angeles
Blum, Edith	Sr.,	A	Los Angeles
Blumve, Ruth Augusta	S.,	A	Los Angeles
Boise, Maude V.	Sr.,	A	Los Angeles
Bolton, Arthur H.	S.,	A	Los Angeles
Bolton, Lida May	U.,	A	Los Angeles
Bond, Bertha	Sr.,	A	Los Angeles
Bouton, Edward	F.,	S	Los Angeles

Boor, Edith R.	U.,	A	Los Angeles
Bose, Roy George	F.,	A	Burlington, Wis.
Bostwick, Genevieve	Sr.,	A	Los Angeles
Bonelli, William George	Sr.,	A	Kingman, Ariz.
Bowen, Mary Spencer	S.,	A	Los Angeles
Bowen, W. Louise	F.,	A	Los Angeles
Bower, Helen Modjeska	S.,	A	Los Angeles
Bowler, Glenn G.	F.,	S	Los Angeles
Boyd, Lillian Cecelia	Sr.,	A	Los Angeles
Boyd, Mary Letty	F.	A	Fowler
Bradley Floyd Edison	J.,	A	Chula Vista
Bradley, Millie	U.,	A	Venice
Bradley, Wilbur Farrell	Sr.,	A	Chula Vista
Brannan, J. L.	U.,	A	South Pasadena
Bravender, Paul R.	F.,	S	Los Angeles
Brethauer, Gertrude F.	F.,	A	Los Angeles
Brewster, Harold	S.,	A	Oleander
Briggs, Herald L.	Sr.,	S	Santa Monica
Briggs Howard Fansler	S.,	S	Santa Monica
Briggs, Marie	F.,	A	Santa Ana
Bridge, David A.	S.,	A	Pasadena
Brinkmeyer, Emil C.	S.,	A	Los Angeles
Brockman, Clayton Edward	J.,	A	Los Angeles
Brown, Alice Claire	S.,	A	Los Angeles
Brown, Earl Travis	Sr.,	S	Del Rio, Texas
Brown, Geneva	J.	A	Sierra Madre
Brown, James A.	Sp.,	—	Los Angeles
Brown, Linus Westervelt	Sp.,	—	Los Angeles
Brown, Sarah Fails	S.,	A	Huntington Park
Brown, Vesta Estella	F.,	A	Long Beach
Brownell, Giles Corlis	F.,	A	Los Angeles
Browning, Mary Leona	U.,	A	Los Angeles
Brubaker, Martha M.	U.,	A	Los Angeles
Brubaker, Theodore Mercer	Sp.,	—	Los Angeles
Bruce, Charles Edson	S.,	A	Hemet
Bruce, Grace Edna	F.,	A	Hemet
Bruce, Henry Webster	F.,	A	Amherst, Ohio
Bruner, Joseph W.	S.,	A	San Dimas
Bruner, W. Roberta	S.,	A	Los Angeles

Brunn, Howard Thomas	F.,	A	Long Beach
Brush, Helen Dorothy	S.,	A	Los Angeles
Bryson, Frederick Robertson	U.,	A	Los Angeles
Bryson, John A.	U.,	A	Downey
Buck, Daniel	F.,	A	Venice
Buck, Marie Emerson	J.,	A	Los Angeles
Bugbee, Helen Frances	S.,	A	Clarendon, Texas
Bulfinch, Mildred Gray	Sp.,	—	Los Angeles
Bulkeley, William H.	F.,	A	Crowell, Texas
Bullock, Albert Ernest	J.,	A	Los Angeles
Bullock, Frederick W.	U.,	A	Redondo Beach
Bunker, Anna Rosalie	Sr.,	A	Palm Springs
Bunker, Verne Thomas	S.,	A	Los Angeles
Burge, Alice DeLay	F.,	A	Santa Ana
Burgess, Evelyn Sarah	J.,	A	Los Angeles
Burkett, Richard Claire	F.,	A	Orange
Burnight, E. Robert	J.,	A	Los Angeles
Burnight, Ralph Fletcher	S.,	A	Los Angeles
Burnight, Ruth Elizabeth	S.,	A	Los Angeles
Burns, Corinne May	Sp.,	—	Santa Ana
Burns, Lois A.	F.,	A	Los Angeles
Burns, Phil	Sp.,	—	Los Angeles
Burr, Clifford F.	Sr.,	A	Los Mochis, Mexico
Burton, Mrs. Elizabeth E.	Sp.,	—	Los Angeles
Burton, Helen	S.,	A	Los Angeles
Burton, Lois R.	Sr.,	A	Los Angeles
Burton, Roy Wesley	S.,	A	Anadarko, Okla.
Burton, Sarah May	F.,	A	Los Angeles
Bush, Bessie	U.,	A	Los Angeles
Butcher, Lloyd	F.,	S	Los Angeles
Butterfield, Clarence	F.,	A	Chino
Butterfield, Howard Lincoln	F.,	A	Chino
Butters, Archibald D.	Sp.,	—	Long Beach
Byrne, Loretta Petronilla	F.,	A	Los Angeles
Calkins, Lorna Ruth	F.,	A	Los Angeles
Campbell, Juliette Dumont	J.,	A	Los Angeles
Campbell, Roy S.	Sp.,	—	Los Angeles
Canaday, Ray Vernon	F.,	A	Rialto
Canepa, Mary	Sr.,	A	Los Angeles

Carkeek, Charles Burton	J.,	S	Pasadena
Carleton, Harold A. R.	F.,	A	Los Angeles
Carlisle, Fred B.	J.,	A	Los Angeles
Carlson, Elsie Mathilda	J.,	A	Los Angeles
Carlson, Leonard W.	S.,	S	Oleander
Carpenter, Elizabeth	F.,	A	Hollywood
Carse, Herbert Elwin	S.,	S	Los Angeles
Carr, Ethel M.	F.,	A	Calexico
Carrell, Goldie Mae	S.,	A	Gardena
Carter, Dorothy Eileen	F.,	A	Los Angeles
Cartmill, Eva Marguerite	F.,	A	Tulare
Castle, Chandos Barrett	F.,	A	Long Beach
Catudal, Annette Elia	S.,	A	Los Angeles
Cavins, Wilhelmina V.	S.,	A	Santa Ana
Chamberlain, Iris Clark	F.,	A	Beardon, Ark.
Chamberlin, Edward Joseph	S.,	S	Los Angeles
Chamberlin, Frederick T.	U.,	A	The Palms
Chamberlin, Joie Louise	J.,	A	Los Angeles
Chapman, Arthur	Sr.,	A	Los Angeles
Chase, Gladys	F.,	A	Los Angeles
Chase, Vera Alta	J.,	A	Los Angeles
Cheek, Bertha	J.,	A	Los Angeles
Chezick, Verna Edna	J.,	A	Los Angeles
Chick, Oscar Ralph	F.,	A	Rhea, Ark.
Childs, Will Paul	Sr.,	S	Los Angeles
Chung, Elbert Yit	F.,	S	Los Angeles
Churchill, Estella L.	S.,	A	Los Angeles
Clapperton, Julia Anna	F.,	A	Highgrove
Clapperton, Lela Maude	F.,	A	Highgrove
Clark, Herbert F.	Sr.,	A	Alhambra
Clark, Judson Hunter	Sr.,	S	El Centro
Clark, Leo Farnum	F.,	A	El Centro
Clark, Loren Tompkins	J.,	A	Los Angeles
Clark, Marian Weller	J.,	A	Los Angeles
Clark, Ray Henry	S.,	S	Huntington Park
Clark, Willis Winfield	Sr.,	A	Los Angeles
Clay, Margaret Ethel	F.,	A	Los Angeles
Cleveland, Hazel Emma	F.,	A	Long Beach
Cochran, Mabel Edna	Sp.,	—	San Jose



Colburn, Walter Erford	F.,	A	Riverside
Coleman, Virginia Louise	F.,	A	Kelvin, Ariz.
Colestock, Grace B.	Sr.,	A	Los Angeles
Coller, Clara Jane	Sr.,	A	Los Angeles
Colver, Seth Ingraham	F.,	A	Los Angeles
Compton, Mrs. Henrietta	Sp.,	—	Los Angeles
Cone, Gladys Myra	J.,	A	Compton
Connor, Edith Adell	Sp.,	—	Los Angeles
Consigny, Reginald O.	F.,	A	Los Angeles
Constant, Claribel	F.,	A	Sierra Madre
Cook, Clarence C.	Sp.,	—	San Bernardino
Cook, Katherine A.	Sp.,	—	Worcester, Mass.
Cook, Leona C.	S.,	A	Ontario
Cook, Nellie May	S.,	A	Ontario
Cook, Ray Edalbert	F.,	A	San Francisco
Cookman, Alfred	Sr.,	A	Moneta
Cooper, Stuart F.	Sp.,	—	Los Angeles
Copeland, John Drew	F.,	A	Rivera
Core, Carroll B.	F.,	A	Los Angeles
Core, Catherine	S.,	A	Los Angeles
Cornell, James Hecston	Sp.,	—	Fresno
Costello, Ethel L.	F.,	A	Los Angeles
Cottle, Katharine	J.,	A	Los Angeles
Couch, Esther T.	F.,	A	Los Angeles
Coughlon, Donald A.	J.,	A	Los Angeles
Covington, Irma La Mira	F.,	A	Redlands
Cox, James Cecil	F.,	A	Los Angeles
Crabill, Hazel Dell	Sr.,	A	Los Angeles
Craig, Gerald Allen	J.,	A	La Habra
Craig, Leslie	F.,	A	Long Beach
Cramer, John N. P.	J.,	A	Redondo Beach
Chandall, William McKinley	Sp.,	—	Los Angeles
Crill, Ethel Enola	S.,	A	Pomona
Crippen, Reid P.	F.,	S	Los Angeles
Croissant, Albert Henry	J.,	A	Sawtelle
Crow, Emma Owena	Sr.,	A	Los Angeles
Crowell, Alice Gray	Sp.,	—	Los Angeles
Crowther, Rhea	Sp.,	—	Los Angeles
Crumley, E. Worden	F.,	A	Los Angeles

Culver, George A.	S.,	A	Los Angeles
Cummings, Irene	Sp.,	—	Los Angeles
Cunningham, Hugh P.	F.,	A	Los Angeles
Curry, Willard James	F.,	A	Long Beach
Curtis, Marion Francis	F.,	A	Pasadena
Dalin, Franz Emanuel	F.,	A	Covina
Dallman, Lelia Ruth	Sr.,	A	Los Angeles
Dallas, William James	J.,	A	Los Angeles
Daniel, S. Josephine	Sr.,	A	Fullerton
Danielian, Arthur Charles	J.,	A	Los Angeles
Dashiell, James R.	Sp.,	—	Los Angeles
David, Frances Josephine	Sr.,	A	Los Angeles
Davies, Henrietta A.	Sr.,	A	Los Angeles
Davis, Charlotte M.	F.,	A	Pomona
Davis, Corinne	Sp.,	—	Los Angeles
Davis, Earl D.	S.,	A	Los Angeles
Davis, Eleanor Madeline	Sr.,	A	Los Angeles
Davis, Heloise Marie	J.,	A	Los Angeles
Day, Alice Helen	F.,	A	Pasadena
Dennis, Alice Ruberta	S.,	A	Los Angeles
de Silva, George Gard	F.,	A	Los Angeles
Deuel, Clyde Curtis	J.,	S	Delano
Detrick, Henry Lyster	Sp.,	—	Los Angeles
Dick, Margaret E.	F.,	A	Anaheim
Dickey, Clarence D., Jr.	F.,	A	Hermosa
Dillenback, Ruth	F.,	A	Alhambra
Dimmitt, Ralph B.	S.,	A	Huntington Park
Dinsmore, Marguerita G.	F.,	A	Inglewood
Dockstader, Rosa Etta	Sp.,	—	Alhambra
Dodson, Corin	Sp.,	—	South Pasadena
Dodson, Ellen M.	F.,	A	Riverside
Doheny, Edward L., Jr.	Sr.,	A	Los Angeles
Doherty, Mrs. Sarah Patten	Sr.,	A	Los Angeles
Dole, Eva Edna	F.,	A	Los Angeles
Dolley, Lois Evelyn	S.,	A	Long Beach
Don Carlos, Mrs. Florence	S.,	A	Los Angeles
Donley, Mabel M.	Sp.,	—	Los Angeles
Donnelly, John Leo	F.,	A	San Diego
Douglas, Maud E.	U.,	A	Los Angeles

Dow, Wilber Alen	F.,	A	Los Angeles
Downey, William P.	F.,	A	Vernal, Utah
Doyle, Sue A.		A	Los Angeles
Dresden, Ione Lillian	S.,	A	Los Angeles
Dubin, Jennie	S.,	A	Los Angeles
Duguid, Russell H.	F.,	A	El Paso, Texas
Dunbar, Elizabeth	Sp.,	—	Los Angeles
Dungan, Elmer J.	J.,	A	Winfield, Kan.
Dunham, Inez Dorothy	Sr.,	A	Los Angeles
Dunham, Lewis Earl	J.,	A	Manitou, Okla.
Dunlap, Mary Elizabeth	S.,	A	Riverside
Dunlay, Raymond	Sr.,	A	Delaware, O.
Dunn, Doris Ruth	F.,	A	Lamanda Park
Dunn, Ralph G.	F.,	A	Long Beach
Durkee, Ruth Taylor	S.,	A	Los Angeles
Duvall, Mrs. Edna C.		—	El Monte
Dwight, Charles	Sp.,	—	Los Angeles
Dyar, Dorothy Margaret	J.,	A	Los Angeles
Dyer, Frances P.	F.,	A	Los Angeles
Eads, Robert J.	J.,	A	Los Angeles
Early, Mrs. Della	Sr.,	A	Los Angeles
Edwards, George R.	F.,	A	Los Angeles
Edwards, Margaret Leah	S.,	A	Whittier
Eisenmayer, Mildred A.	S.,	A	Los Angeles
Eisenberg, Kate	Sr.,	A	San Diego
Elliott, Mrs. Florence	S.,	A	Los Angeles
Elliott, Joseph P.	S.,	A	Los Angeles
Elwin, Mrs. Gertrude	Sp.,	—	Los Angeles
Epler, Nora Elizabeth	S.,	A	El Centro
Epley, James Franklin	U.,	A	Los Angeles
Epstein, Alfred	S.,	A	New York
Erb, Maud Winifred	F.,	A	Los Angeles
Estes, Ruth J.	F.,	A	Los Angeles
Evans, E. Manfred	J.,	A	Hollywood
Evans, Ruthetta Marie	F.,	A	Los Angeles
Evans, William M.	F.,	A	Long Beach
Eveland, Ruth Lucile	Sr.,	A	Los Angeles
Fagan, Elmer D.	F.,	A	Oxford, Kan.
Farley, Floyd Wesley	S.,	A	Burbank

Farman, Margaret Anna	S.,	A	Napa
Faust, Leo Jackson	F.,	S	Nogales, Ariz.
Feather, Marguerita	F.,	A	Los Angeles
Feather, Mildred H.	F.,	A	Los Angeles
Fechtig, Janie Morriss	F.,	A	Los Angeles
Feeler, William Henry	J.,	A	Los Angeles
Feltham, Dorothy Elizabeth	S.,	A	Long Beach
Felts, Ruth	S.,	A	Los Angeles
Ferguson, Carrie Hazel	S.,	A	Los Angeles
Ferl, Emily Matilda	S.,	A	San Pedro
Field, William Joseph	F.,	A	Los Angeles
Finch, Florence W.	J.,	A	Los Angeles
Finley, James B.	F.,	A	Los Angeles
Fish, Dale O'Leon	J.,	A	Chula Vista
Fitzpatrick, Harold P.	J.,	A	Los Angeles
Fleming, Alice M.	Sp.,	—	Los Angeles
Flickwir, Mary G.	S.,	A	Los Angeles
Fleishman, Mrs. Gussie	Sr.,	A	Los Angeles
Flynn, Louise C.	Sp.,	—	Los Angeles
Follen, Betty	F.,	A	Los Angeles
Fowler, Chas. Frank	F.,	A	Los Angeles
Fowler, Mildred Aileen	S.,	A	Los Angeles
Fox, Dilla Hazel	F.,	A	Alhambra
Fraisher, Robt. L.	Sp.,	—	San Fernando
Frasher, Lloyd A.	S.,	A	• Parlier
Frasher, Roscoe L.	Sr.	A	Parlier
Fredricks, Agatha A.	J.,	A	Los Angeles
Freeman, Clyde	F.,	A	Los Angeles
Freeman, Harold A.	Sr.,	A	Riverside
Freeman, Mabel N.	U.,	A	Los Angeles
Freeman, Sherman	F.,	A	South Pasadena
Freese, Theron	Sr.,	A	Los Angeles
Frenger, Eugene Albert	J.,	A	Los Angeles
Frenger, Paul R.	F.,	A	Los Angeles
Fujisawa, Koho	Sr.,	S	Los Angeles
Fuller, Ernest Leroy	S.,	A	Ontario
Fuller, Iona Faye	J.,	A	Los Angeles
Furber, Marion Ruth	Sr.,	A	Los Angeles
Fybusch, Irma Theodora	S.,	A	Los Angeles

Gardner, Eleanor A.	Sr.,	A	New York
Gard, Earle William	J.,	S	Monrovia
Gard, Clare De Wolfe	J.,	S	Monrovia
Garred, Max E.	F.,	A	Moneta
Gage, B. Marie	J.,	A	Pasadena
Gail, Sherman	Sr.,	A	Covina
Ganser, William George	F.,	S	Colton
Gaud, Margaret	Sr.,	A	Los Angeles
Gaul, Victor B.	F.,	A	Los Angeles
Gee, Denson W.	F.,	A	Long Beach
Gehlen, Viola Catherine	J.,	A	Los Angeles
Geissinger, Wayland B.	J.,	A	Los Angeles
George, Mary Minerva	F.,	A	Los Angeles
George, Harry Bushnell	Sr.,	A	Los Angeles
George, Noal F.	F.,	A	Los Angeles
Gilbert, Hazel Jeannette	Sr.,	A	Pasadena
Gilbert, Mrs. Jessie R.	Sp.,	—	Los Angeles
Gilbert, Mabel A.	Sr.,	A	Los Angeles
Gilmore, Malcolm La Tour	F.,	A	Los Angeles
Girdlestone, May	J.,	A	Los Angeles
Gilson, Bessie R. L.	J.,	A	Los Angeles
Gleiss, Gladys Ilela	S.,	A	Los Angeles
Gleiss, Irene E.	Sr.,	A	Los Angeles
Goldthwaite, Helen	Sp.,	—	Glendale
Gonailhardon, Ida Emilie	F.,	A	Los Angeles
Goodfellow, Jack	S.,	A	Englevale, N. D.
Gormley, Mrs. Harriet	Sp.,	—	Chino
Gormley, Susan	S.,	A	Los Angeles
Grant, Harriett C.,	Sp.,	—	Los Angeles
Gratton, Marjorie Helen	F.,	A	Pasadena
Graves, Rachel E.	S.,	A	Los Angeles
Gray, Mabel T.	Sp.,	—	Los Angeles
Gay, Russell Merle	F.,	A	Los Angeles
Gray, Gretta Vera	Sr.,	A	Los Angeles
Green, Justin M.	F.,	A	Los Angeles
Greenburg, Eunice H.	F.,	A	Douglas, Ariz.
Greene, Portia	S.,	A	Riverside
Greene, Thomas A.	S.,	A	Los Angeles
Greenleaf, Lucile	F.,	A	Brawley



Grieve, Jessie Marie	J.,	A	Los Angeles
Griffin, Harry E.	S.,	A	Pomona
Griffin, Herschel Raymond	J.,	A	Los Angeles
Grimes, Ethel Bertha	F.,	A	Arcadia
Grimes, William Frank	S.,	A	Pasadena
Grinnell, George Henry	U.,	A	Los Angeles
Grose, Madison F.	Sr.,	A	Los Angeles
Grua, Clifford Perry	J.,	A	South Pasadena
Gunning, Alma E.	U.,	A	Los Angeles
Gurney, Barbara Elizabeth	S.,	A	Hollywood
Guthridge, Russell M.	J.,	A	Los Angeles
Hagberg, Mabel E.	J.,	A	Sedalia, Mo.
Haight, Geo. Washington, Jr.	F.,	A	Chatworth
Halfman, Peter D.	Sr.,	A	Los Angeles
Hall, Arden J.	F.,	A	Los Angeles
Hamer, Hiram J.	S.,	S	Los Angeles
Hammond, Olga R.	J.,	A	Riverside
Hammons, Mabel	Sr.,	A	Pasadena
Haney, Ralph Rudolph	F.,	A	Los Angeles
Hannah, Ruby E.	S.,	A	Montebello
Hanning, Bessie Emily	Sr.,	A	Los Angeles
Hanning, Esther Merl	J.,	A	Los Angeles
Hanning, Ida L.	Sr.,	A	Los Angeles
Hansen, Astrid J.	Sr.,	A	Los Angeles
Hargis, Helen E.	F.,	A	Los Angeles
Harman, Earl C.	F.,	S	Los Angeles
Harris, Gladys Reo	S.,	A	Pasadena
Harris, Leonard	F.,	A	Los Angeles
Harrison, Elizabeth S.	F.,	A	Santa Monica
Harrison, Mazie E.	Sp.,	—	Los Angeles
Hartford, Emile Augustus	S.,	A	Los Angeles
Harvey, Rowland Hill	F.,	A	Los Angeles
Hathaway, Clair	S.,	A	Los Angeles
Hathaway, Gladys M.	Sr.,	A	Prescott, Ariz.
Haupt, Fred C.	F.,	A	Los Angeles
Hawkins, Jessie Meredith	Sr.,	A	Los Angeles
Hayden, Marcella	S.,	A	Los Angeles
Hazeltine, Roland P.	F.,	A	Los Angeles
Hedstrom, Esther V.	Sr.,	A	Anaheim

Heflinger, Lydia Elsie	U.,	A	Pasadena
Helm, Henrietta S.	S.,	A	Pasadena
Helm, Marion Ruth	S.,	A	Pasadena
Henderson, Clifford William	F.,	A	Los Angeles
Henrickson, Althea	S.,	A	Los Angeles
Herbert, Myrta E.	Sp.,	—	Los Angeles
Hesselberger, Henrietta	Sp.,	—	Los Angeles
Hewitt, Edward	J.,	A	Meriden, Conn.
Hewitt, George W.	S.,	A	Tropico
Hickman, Lillie A.	J.,	A	Alhambra
Hicks, Florence Elizabeth	J.,	A	Los Angeles
Hicks, Robert S.	J.,	A	El Monte
Hicks, Vera Valine	J.,	A	Gardena
Hiett, Myrtle A.	Sr.,	A	Sidney, Neb.
Higgins, Elmer	Sr.,	A	Long Beach
Higgins, Lena	J.,	A	Long Beach
Hill, Anna L.	Sp.,	—	Los Angeles
Hill, Breta B.	F.,	A	Mecca
Hill, Gladys Grace	J.,	A	Los Angeles
Hilliard, Mrs. Barta Emma	Sp.,	—	Los Angeles
Hinckley, Ethel M.	J.,	A	Los Angeles
Hine, George Tilton	S.,	A	Los Angeles
Hinsdale, Jennie Ruth	J.,	A	Los Angeles
Hinsdale, William	Sr.,	A	Los Angeles
Hiskey, Marguerite Irene	S.,	A	Los Angeles
Hitchcock, Earl Edmund	Sp.,	A	Los Angeles
Hodge, Harold V.	F.,	A	Los Angeles
Hodges, Mrs. Elizabeth M.	Sp.,	—	Los Angeles
Hoenshell, Hattie	J.,	A	Bakersfield
Hoffman, Elmer Henry	S.,	A	Los Angeles
Hoffman, Ezra Don	F.,	A	Mivoray, Iowa
Holland, Leland W.	Sr.,	A	Pasadena
Hollenbaugh, Mabel N.	Sp.,	—	McCune, Kan.
Hollister, Adelaide E.	F.,	A	Venice
Hollister, Augustus	S.,	A	Venice
Holman, William S.	Sp.,	—	Los Angeles
Homrighausen, George A.	S.,	A	Gardena
Hood, Blanche	U.,	A	Los Angeles
Hood, Mary Katheryn	F.,	A	Hicksville, Ohio

Hook, Anna Mira	U.,	A	Glendale
Hoover, Esther	S.,	A	Los Angeles
Horikoshi, Tokujiro	J.,	A	Hollywood
Horne, Ruth	S.,	A	Los Angeles
Horton, Louise	J.,	A	Long Beach
Houk, George D.	Sr.,	A	Los Angeles
Hovey, Byron Price	F.,	A	Los Angeles
Howe, Paul T.	F.,	A	Los Angeles
Howell, Editha	S.,	A	Los Angeles
Howze, Mrs. Katherine	Sp.,	—	Los Angeles
Hoyt, Howard Hastings	Sr.,	A	Eagle Rock
Hubbard, Ruth	F.,	A	Los Angeles
Hubbard, Virginia D.	F.,	A	Los Angeles
Hughes, Clifford E.	J.,	A	Los Angeles
Hughes, Elise Elderkin	S.,	A	Los Angeles
Hughes, Faye Edith	F.,	A	Los Angeles
Hughes, Hal D.	J.,	A	Tempe, Ariz.
Hughes, Ray A.	F.,	A	Los Angeles
Humiston, Beth	F.,	A	Los Angeles
Humphreys, Helen M.	F.,	A	Los Angeles
Hunt, Harry Western	Sr.,	A	Santa Monica
Hunt, Lloyd F.	F.,	S	Los Angeles
Hunt, Paul Adams	F.,	A	Los Angeles
Hurlbut, Ethel A.	J.,	A	Los Angeles
Hurt, Bertha M.	J.,	A	Los Angeles
Huse, Edwin Ernest	F.,	A	Los Angeles
Huse, Lucy	S.,	A	Los Angeles
Hutchinson, John Edgar	S.,	A	Los Angeles
Hutchinson, Mrs. Emma R.	S.,	A	Los Angeles
Ilgen, Dorothy Wallace	Sp.,	—	Warrensburg, Mo.
Ingersoll, Caroline M.	Sr.,	A	Los Angeles
Ingram, William James	F.,	A	Los Angeles
Inwood, Gertrude Alfreda	S.,	A	Los Angeles
Inwood, Marian P.	S.,	A	Los Angeles
Jackins, Dorothy D.	Sp.,	—	Los Angeles
Jackson, Bernice de Mont	Sp.,	—	Los Angeles
Jackson, Marie H.	Sp.,	—	Los Angeles
Jacoby, Edgar H.	Sp.,	—	San Jose
James, Madeleine R.	S.,	A	Los Angeles

Jamgochian, Araxie	S.,	A	Los Angeles
Jayne, Ralph Tatlock	S.,	S	Los Angeles
Jenkins, Rayel B.	Sp.,	—	Los Angeles
Jennings, Francis	Sp.,	A	Los Angeles
Jennings, Frank Owen	Sp.,	—	Los Angeles
Jisayi, Titsugai	Sp.,	—	Los Angeles
Johnson, Amelia Caroline	Sp.,	—	Los Angeles
Johnson, Marguerite H.	J.,	A	Los Angeles
Johnson, Ruth E.	J.,	A	Pasadena
Johnson, Ruth	Sp.,	—	Los Angeles
Johnson, O. Verner	S.,	A	Kingsburg
Jones, Bessie H.	Sr.,	A	Los Angeles
Jones, Herbert G.	F.,	A	Los Angeles
Jones, Mrs. Sarah A.	Sp.,	—	Los Angeles
Jordan, Henry Erwin	F.,	S	Los Angeles
Jordan, Wayne Early	J.,	A	Los Angeles
Judson, Mrs. Louise Foster	U.,	A	Los Angeles
Kadish, Marguerite	S.,	A	Los Angeles
Kadlitz, Frank S.	Sp.,	—	Los Angeles
Kaler, William W.	Sp.,	—	Los Angeles
Kalliwoda, Gladys May	J.,	A	Los Angeles
Kallstedt, Frances E. E.	S.,	A	Pasadena
Kauffman, Florence L.	S.,	A	Des Moines, Iowa
Kawamoto, Masasuke	S.,	S	Los Angeles
Kazanjan, Karl P.	S.,	S	Fowler
Kearns, Mattie I.	F.,	A	Pala
Kelsey, James Clayton	U.,	A	Long Beach
Kellogg, Sanford B.	Sp.,	—	Los Angeles
Kelly, Fred Warren	Sp.,	—	El Modeno
Kendall, Joseph	S.,	S	Los Angeles
Kent, Arthur H.	J.,	A	Chicago, Ill.
Keppie, Elizabeth E.	Sp.,	—	Haverhill, Mass.
Kern, Helen	S.,	A	Los Angeles
Kersey, Cleon	Sr.,	A	Los Angeles
Kersey, V.	Sr.,	A	Los Angeles
Kienle, J. E.	U.,	A	Los Angeles
Kim, Kwan You	J.,	A	Los Angeles
Kimmel, Stanley P.	Sp.,	—	Los Angeles
Kinder, Evelyn C.	S.,	A	Los Angeles

King, Hazel Olga	F.,	A	Los Angeles
King, Ruby Mildred	S.,	A	Long Beach
Kinosita, James Otoichi	Sp.,	—	Los Angeles
Kirby, Charlotte	Sr.,	A	Los Angeles
Kirk, Duffy F.	F.,	A	Hollywood
Kirk, Orchid Marie	S.,	A	Long Beach
Kirkpatrick, Annie Istalena	J.,	A	Los Angeles
Kirkpatrick, Ross C.	J.,	A	Los Angeles
Kijawsky, Goldie	F.,	A	Los Angeles
Kluth, Paul John	S.,	A	Clintonville, Wis.
Knight, Charles L.	Sp.,	—	Los Angeles
Knott, James Proctor	J.,	A	Los Angeles
Knudsen, Thorkild R.	Sp.,	—	Lohals, Denmark
Kohachiro, Yamamoto	F.,	A	Los Angeles
Kondo, Frank Nob	Sr.,	A	Los Angeles
Kopp, Theodore Edward	F.,	S	Bell
Kraus, O. K.	S.,	A	Long Beach
Krebs, William	F.,	S	Azusa
Kress, Elizabeth H.	Sp.,	—	Los Angeles
Krouss, William Alfred	S.,	S	Los Angeles
Kuebug, Memo Simon	Sp.,	—	Los Angeles
Kujozunu, Ogawa	J.,	A	Los Angeles
Lacey, Gladys May	F.,	A	Independence
Lachman, Dorothy	F.,	A	Seattle, Wash.
La Due, Wendell R.	S.,	A	Wheeling, W. Va.
La Gue, Virginia A.	Sp.,	—	Los Angeles
Lamborn, Miriam W.	S.,	A	Los Angeles
Lane, Mary Marita	S.,	A	Yucaipa
Langston, Joyce	J.,	A	Los Angeles
Langton, Mary C.	Sp.,	—	Los Angeles
Laning, Emma Mae	S.,	A	Los Angeles
Lantz, Evelyn Elizabeth	Sp.,	—	Los Angeles
La Porte, Mrs. Lura E.	J.,	A	Los Angeles
Lawler, James K.	S.,	S	Gardena
Lawler, John W.	S.,	S	Gardena
Lawlor, Ita Mary	J.,	A	Los Angeles
Leadingham, Russell M.	F.,	A	Pomona
Lee, Lyman Charles	S.,	A	Modesto
Lee, Ednest O.	Sr.,	A	Ontario



Lee Ettie	Sr.,	A	Thatcher, Ariz.
Lee, Anna Marie	F.,	A	Compton
Leimkuhler, Macie Edna	J.,	A	Pasadena
Levy, Charles Byron	F.,	A	Los Angeles
Lewis, Winnie D.	F.,	A	Burbank
Libis, Dorothy	S.,	A	Los Angeles
Lickley, Ernest Jameson	Sp.,	—	Los Angeles
Liddle, Laura	Sp.,	—	Santa Monica
Lieberg, Helenita	S.,	A	Los Angeles
Liggett, Harry B.	F.,	A	Los Angeles
Liggett, Hazel Mary	S.,	A	Los Angeles
Lightner, Christine	U.,	A	Los Angeles
Liljenwall, Carl Theodore	Sp.,	—	Pasadena
Lindsley, Mary Elizabeth	Sp.,	—	Pasadena
Linn, Mary Seaman	U.,	A	Los Angeles
Listman, Charles Werner, Jr.	F.,	S	Los Angeles
Litterer, Bessie Katharine	S.,	A	Los Angeles
Livernash, Harry L.	S.,	A	Huntington Park
Livernash, Leo Dean	J.,	A	Huntington Park
Livernash, Leonard O.	J.,	A	Huntington Park
Lloyd, Nada N.	F.,	A	Los Angeles
Long, Isabel Lillian	J.,	A	Los Angeles
Long, Laura	S.,	A	Los Angeles
Long, Tirrell	J.,	A	Los Angeles
Long, Wilbur H.	S.,	A	Los Angeles
Longmoor, Harold Samuel	F.,	A	Mesa, Ariz.
Longmoor, Walter M.	Sr.,	A	Mesa, Ariz.
Lopez, Malvina	S.,	A	San Gabriel
Lovejoy, Lena Goldsmith	Sr.,	A	Los Angeles
Lower, Will Arthur	F.,	A	Long Beach
Lowrey, Rachel Gertrude	S.,	A	Wilmington
Lukens, Charles E., Jr.	Sp.,	—	Coronado
Lum, Maryette Hawley	Sr.,	A	Hollywood
Lyon, Arthur J.	Sp.,	—	Glendale
Lyon, Mildred Irene	F.,	A	Glendale
Lyon, Sarah Wildey	U.,	A	Los Angeles
McArthur, Xina Eliza	F.,	A	Santa Ana
McCartney, Norma	F.,	A	Pasadena
McCloskey, Pearl Louise	U.,	A	Los Angeles

McCormick, Edwin Rice	F.,	A	Ashland, Ore.
McCormick, Grace Edith	F.,	A	Los Angeles
McCoy, John Carl	J.,	S	Wooster, Ohio
McCrea, Alta Marguerite	S.,	A	Ontario
McCurdy, Bernice Vivian	Sr.,	A	Pasadena
McDaniel, Jean	U.,	A	Los Angeles
McDermott, George A.	U.,	A	Gardena
McDonald, Annie Laurie	S.,	A	Los Angeles
McDonald, Celia E.	F.,	A	Pasadena
McEuen, Isabel	S.,	A	Los Angeles
McEuen, Virgil Lester	Sr.,	A	San Jacinto
McGarraugh, Margaret	Sp.,	—	Los Angeles
McGuire, Mary	J.,	A	Los Angeles
McKenzie, Dorothy	Sp.,	—	Los Angeles
McKinnon, Ida B. Kirkman	S.,	A	Pasadena
McKnight, James Stuart	J.,	A	Los Angeles
McLaren, Harry A.	F.,	A	Bishop
McLauchlin, Marion Elsie	F.,	A	Long Beach
McLaughlin, Gertrude	S.,	A	Los Angeles
McMahan, Estella Lenor	Sp.,	—	Riverside
McManis, Nancy	J.,	A	Los Angeles
McMaster, Robert Neer	Sr.,	S	Los Angeles
McMore, Blanche Aileen	J.,	A	Los Angeles
McNaughton, Dixon A.	F.,	A	Los Angeles
McNeely, John G.	Sp.,	—	Santa Monica
McNeill, Ruth Helen	F.,	—	Hollywood
McQuiston, Clyde Richard	F.,	A	Rialto
MacCormack, W. Roland	F.,	A	Los Angeles
MacDonald, Esther Mary	F.,	A	Los Angeles
MacIntyre, Carlyle F.	Sr.,	A	Los Angeles
MacIntyre, Isabella	Sp.,	—	Los Angeles
Magnuson, Edla Charlotte	Sr.,	A	Pasadena
Mahan, Henry W., Jr.	F.,	A	Pasadena
Mansfield, Ruth Wynne	Sr.,	A	Los Angeles
March, Edith Mary	U.,	A	Los Angeles
Marks, Inez May	Sr.,	A	Pasadena
Marshall, Geo. Howell	F.,	A	Long Beach
Martens, Frieda Marie	S.,	A	Los Angeles
Martie, Menga Anna	J.,	A	Los Angeles

Martin, George M.	J.,	A	Beaumont
Martin, Helene H.	F.,	A	Fallbrook
Martin, Samuel B.,	U.,	A	Pasadena
Marvin, Hallie	S.,	A	Los Angeles
Mason, Mildred Helen	J.,	A	Eagle Rock
Mathes, Mary M.	Sp.,	—	Mesilla Park, N. M.
Mathews, Nettie Alice	S.,	A	Artesia
Matlin, David	J.,	A	Los Angeles
Matsuhara, Iwao	J.,	A	Los Angeles
Maxfield, Marshall Joseph	F.,	S	Caruthers
May, Francis Davis	F.,	A	Ontario
Mayo, Ella Bratton	S.,	A	Redondo Beach
Mason, Mildred Helen	Sp.,	—	Eagle Rock
Menn, Edna Irene	J.,	A	Los Angeles
Merrihew, Orrel Lincoln	F.,	A	Pasadena
Messinger, Irving	Sp.,	—	San Diego
Methfessel, Louise Melanie	Sp.,	—	Los Angeles
Milhous, William	F.,	A	Whittier
Millar, Cheryl R.	Sp.,	—	Los Angeles
Millar, Vera A. A.	Sr.,	A	Los Angeles
Miller, Edwin Woods	J.,	A	Los Angeles
Miller, Grace Elizabeth	F.,	A	Redlands
Miller, Helen Mary	S.,	A	Santa Monica
Miller, Leon H.	U.,	A	Los Angeles
Miller, Marjorie	F.,	A	Spokane, Wash.
Miller, Martin Sylvester	F.,	A	Reedley
Miller, Ross V.	S.,	A	Los Angeles
Miller, Stewart S.	S.,	A	La Mirada
Mills, Esther Margaret	F.,	A	Lamanda Park
Mills, Irene Pamela	Sr.,	A	Anaheim
Min, Chan Ho	Sr.,	A	Los Angeles
Mitchell, Helen A.	U.,	A	Los Angeles
Miyata, Seinoshin	F.,	A	Los Angeles
Monfort, Harriet B.	F.,	A	Los Angeles
Moore, Mrs. Celeste N.	S.,	A	Los Angeles
Moore, Gertrude Hazel	S.,	A	Rushville, Ill.
Moorman, Mrs. Janet Marie	Sr.,	A	Los Angeles
More, Marguerite B.	F.,	A	Los Angeles
Moriya, Toshiki	S.,	A	Los Angeles

Morrow, Howard Everette	F.,	A	Los Angeles
Morrow, Paul R.	Sp.,	—	Hollywood
Morse, Arthur Burton	F.,	S	Los Angeles
Moulton, Harold Emery	F.,	A	Long Beach
Muller, Augusta E.	F.,	A	San Pedro
Multer, Hugh James	Sr.,	A	Los Angeles
Murakami, Peter Foranosuke	S.,	A	Los Angeles
Murray, Elva Elizabeth	Sr.,	A	Los Angeles
Murray, Phillips Welwood	S.,	A	Los Angeles
Myers, Bertha B.	Sp.,	—	Los Angeles
Naftzger, Idalio Lyman	Sp.,	—	Los Angeles
Naismith, Helen Agnes	F.,	A	Los Angeles
Nathan, Robert F., Jr.	J.,	A	New York
Nau, Converse	F.,	A	Santa Ana
Nazarin, K. Karnig	F.,	S	Fowler
Neahr, Marie E.	Sp.,	—	New York
Neely, Gladys H.	F.,	A	Los Angeles
Neely, Roy Davis	F.,	A	Paducah, Tex.
Nelson, Elmer S.	J.,	A	Los Angeles
Nelson, Jennette	J.,	A	Los Angeles
Neüls, Marion	F.,	A	Los Angeles
Newberry, Marion	J.,	A	Los Angeles
Newman, Claire Frances	F.,	A	Los Angeles
Newton, Geneva Louise	F.,	A	Los Angeles
Nichols, Alma P.	J.,	A	Los Angeles
Nicholson, Marian	S.,	A	Gardena
Nickey, Jeanette M.	Sp.,	—	Long Beach
Nixon, Joanna Parker	J.,	A	Pasadena
Nogle, Alta Grace	Sp.,	—	Los Angeles
Nordstrom, Benjamin G.	S.,	A	Kingsburg
North, Therza E.	S.,	A	Sierra Madre
Norton, Marguerite N.	F.,	A	Los Angeles
Nowrey, Joseph Edwin, Jr.	J.,	A	Los Angeles
Noyes, Lyman Wells	Sp.,	—	Los Angeles
Oakes, Leon Jay	U.,	A	Los Angeles
Oakes, Mary Ethel	J.,	A	Colton
Oakley, Clemmence Rebecca	U.,	A	Los Angeles
Oertley, Bernhard	J.,	A	Garden Grove
Ogawa, Kujozumi	S.,	A	Japan

Ohnsorg, Marvel Dawn	F.,	A	Los Angeles
Okawara, Yutaka	Sp.,	—	Japan
Olds, Margaret Roberta	Sp.,	—	Montebello
Olson, Emery Evans	Sr.,	A	Los Angeles
Olson, Lawrence Edward	Sp.,	—	Los Angeles
Olson, Reuel L.	S.,	A	Los Angeles
O'Neil, Eileen	J.,	A	Los Angeles
Ormsby, Alvin Scott	Sp.,	—	Los Angeles
Osborne, Clara Mae	U.,	A	Los Angeles
Oster, Donald T.	S.,	A	Los Angeles
Ott, Vivian L.	F.,	A	Los Angeles
Padrick, Charles Albert	F.,	A	Los Angeles
Palmer, Elmer B.	S.,	A	Compton
Palmer, Perry E.	S.,	A	Long Beach
Pape, Myrtle Harrison	F.,	A	Los Angeles
Parratt, Sydney L.	S.,	S	Los Angeles
Parrish, Ada Lucile	Sr.,	A	Hanford
Parrish, Douglas Vernon	F.,	A	Los Angeles
Parrish, Harold F.	F.,	A	Los Angeles
Parrish, Katherine F.	Sp.,	—	Santa Monica
Patterson, Joe Jay	F.,	A	Los Angeles
Patton, Clifton Y.	F.,	A	Los Angeles
Patton, Stanley F.	Sp.,	—	Los Angeles
Paul, Florence Thornberg	J.,	A	Los Angeles
Payette, Clara M.	J.,	A	Riverside
Pearce, Lillian Carolyn	F.,	A	Los Angeles
Peck, Mary Hazen	F.,	A	Los Angeles
Pedgrift, Maude Elizabeth	F.,	A	Los Angeles
Pentland, Gertrude Aileen	Sr.,	A	Los Angeles
Perkins, Amy Seamans	U.,	A	Alhambra
Perkins, Frances L.	Sr.,	A	Los Angeles
Perkins, Harold S.	F.,	S	North Adams, Mass.
Perkins, Voltaire Duback	J.,	A	Los Angeles
Perluss, Abe	U.,	A	Los Angeles
Pesqueira, Louisa	J.,	A	San Fernando
Peterson, Etta Louisa	F.,	A	Hermosa Beach
Peterson, Mildred E.	S.,	A	Los Angeles
Phillips, Edna Muriel	J.,	A	Los Angeles
Phillips, Mary J.	F.,	A	Axtell, Kan.



Phelps, Grace Lilian	Sr.,	A	Los Angeles
Pierce, Charles Edward	J.,	A	Glendale
Pierce, Maria Fitch	F.,	A	Los Angeles
Pilibos, Alexander Stephen	J.,	S	Fresno
Podolsky, Boris Jacob	S.,	S	Los Angeles
Poggi, Ruby Adelaide	F.,	A	Los Angeles
Polk, Eunice Belle	S.,	A	Quito, Ecuador, S. A.
Pollich, R. E. Thos.	J.,	A	Los Angeles
Pope, Zemula Waldo	F.,	A	Riverside
Porter, Margaret Annette	S.,	A	Los Angeles
Porter, Roy	Sr.,	A	Los Angeles
Posson, Harry McG.	S.,	A	Los Angeles
Potter, Walter H.	J.,	A	Los Angeles
Potter, Mrs. Nellie I.	U.,	A	Los Angeles
Powers, John	F.,	A	Tucson, Ariz.
Poytress, Eleanor	Sp.,	—	Oleander
Prince, Mary Emily	S.,	A	Hemet
Prindle, George Henry, Jr.	F.,	A	Los Angeles
Prior, Gary Earl	S.,	A	Riverside
Proctor, Sarah Ethyl	J.,	A	Ottumwa, Iowa
Prudhon, Harold Edward	F.,	A	Los Angeles
Pulliam, Artie M.	S.,	A	Los Angeles
Quick, E. Georgiana	Sp.,	—	Los Angeles
Ramsey, Walker M.	Sr.,	A	Los Angeles
Ramseyer, Alma D.	F.,	A	Salt Lake City, Utah
Randolph, Jane Celestia	Sp.,	—	Ankeny, Iowa
Rapp, Coral	F.,	A	Los Angeles
Rapp, Vivian	Sp.,	S	Los Angeles
Rasmus, Henry Irving, Jr.	J.,	A	Long Beach
Rathwell, Thomas R.	J.,	A	Los Angeles
Raymond, Vanness S.	F.,	A	Los Angeles
Reardon, William F.	F.,	A	Los Angeles
Rebber, Leland Lester	Sr.,	A	Los Angeles
Record, Marjorie	S.,	A	Hollywood
Redding, Margaret B.	Sp.,	—	Los Angeles
Renison, Aileen Harriet	J.,	A	Los Angeles
Reynolds, Merle	F.,	A	Long Beach
Rice, Florence Mabel	S.,	A	Palms
Richards, Marcella L.	U.,	A	Los Angeles

Richards, Margaret W.	Sr.,	A	Los Angeles
Richmond, Dean Bates	Sp.,	—	Downey
Riddell, Guernie	Sp.,	—	Los Angeles
Riggins, Edna Browne	Sp.,	—	Los Angeles
Riemenschneider, Esther	F.,	A	Modesto
Riley, Portia Alice	Sp.,	—	Los Angeles
Ritchie, Gerald Westbrook	F.,	A	South Pasadena
Roach, Agnes Irene	F.,	A	Pasadena
Roalfe, Margaret	Sr.,	A	Los Angeles
Roberts, Faith	Sr.,	A	San Fernando
Robertson, Lutie	J.,	A	Los Angeles
Robinson, Mabel E.	S.,	A	Long Beach
Rockwell, Edward Willard	F.,	S	Inglewood
Rodier, Burton N.	J.,	A	Los Angeles
Roehrich, Evelyn Gloria	Sp.,	—	Los Angeles
Rogers, Islay Caroline	J.,	A	Los Angeles
Rosin, Ethel Esther	Sp.,	—	Los Angeles
Ross, Elinor Cordelia	S.,	A	Pasadena
Ross, Hazel D.	Sp.,	—	Sawtelle
Ross, W. H. G.	J.,	S	Los Angeles
Rowell, Virginia Fay	J.,	A	Wilton, Me.
Russell, Ruth Davis	J.,	A	Los Angeles
Ryland, Victor Gordon	Sr.,	A	Los Angeles
Ryon, Lulu Karace	S.,	A	Los Angeles
Sakaizawa, Iohane Fsao	S.,	A	Ivateken, Nippon
Samuels, Adelia Adams	S.,	A	Los Angeles
Samuels, Stewart O.	J.,	A	Los Angeles
Sanger, Francis Irving	Sp.,	—	Los Angeles
Sarnighausen, Olga	J.,	A	Los Angeles
Satterlee, Theodosia E.	Sp.,	—	Los Angeles
Sato, Kennosuke	S.,	—	Los Angeles
Sato, Takeshiro	Sp.,	—	Los Angeles
Sawyer, Elmer E.	Sp.,	—	Los Angeles
Schelnik, Lydia M.	F.,	A	Los Angeles
Schick, Charles J.	S.,	A	Tropico
Schlecht, Martha Loella	J.,	A	Los Angeles
Schlotte, Nellita Fern	S.,	A	Los Angeles
Schmitz, Victorine Annette	S.,	A	Los Angeles
Schneider, Elsa Laura	F.,	A	Los Angeles

Schnoor, Gladys B.	S.,	A	Burbank
Schoeffel, Raymond Louis	U.,	A	South Pasadena
Schoenau, Marjorie A.	Sp.,	—	Los Angeles
Scholl, Marguerite Julia	Sp.,	—	Los Angeles
Schroeder, Mrs. Mary G.	J.,	A	Chicago, Ill.
Schubert, Will	Sr.,	A	Watts
Schultz, Lawrence Henry	S.,	A	Fullerton
Schwartz, Ruth L.	Sp.,	—	Los Angeles
Scott, Alice Louise	F.,	A	Los Angeles
Scott, Clifford Clark	F.,	A	Los Angeles
Scovel, Edith La Vinia	J.,	A	Los Angeles
Seaton, C. William	F.,	A	Riverside
Sebastian, Charles F.	S.,	A	Los Angeles
Sedweek, Edna M.	J.,	A	Los Angeles
Segerstrom, Esther Louise	S.,	A	Santa Ana
Seiji, Satoh	Sr.,	A	Los Angeles
Selig, Gail Briggs	F.,	A	Los Angeles
Sexton, Andrew D.	S.,	A	Hollywood
Shaff, Amy Mary	J.,	A	Eagle Rock
Shamel, Margaret E.	F.,	A	Exeter
Sharp, Edwin Thomas	F.,	A	Needles
Sharp, Luther	J.,	A	Dimmitt, Texas
Sharpe, Edith Florence	S.,	A	Los Angeles
Shay, Carleton	S.,	A	Los Angeles
Sheldon, Caryl Mason	Sp.,	—	Los Angeles
Sheldon, Zelda	J.,	A	Los Angeles
Sherer, Robert E.	F.,	A	Los Angeles
Sherman, Edna Virginia	Sr.,	A	Pasadena
Sherman, J. Leonard	J.,	A	Los Angeles
Shidler, Lois Lillian	Sr.,	A	Long Beach
Shields, Mildred	F.,	A	Los Angeles
Shigihara, Tami	Sp.,	—	Los Angeles
Shimizu, Fred N.	Sp.,	—	Japan
Short, Frank H., Jr.	Sr.,	A	Los Angeles
Shultz, Myrtle	Sr.,	A	Pasadena
Shumway, Charles William	Sr.,	A	Simi
Siegel, Marion H.	F.,	A	Los Angeles
Sigler, John H.	F.,	A	Los Angeles
Silke, Victor Stanley	Sp.,	—	Los Angeles

Silver, Milton	J.,	A	Los Angeles
Silvins, Dorothy M.	S.,	A	Los Angeles
Simmons, Bertha C.	S.,	A	Los Angeles
Simpson, Eddie	S.,	A	San Diego
Sinderf, Ralph T.	F.,	A	Hollywood
Skeele, Franklin Bosworth	S.,	A	Los Angeles
Skinner, Edna E.	J.,	A	Los Angeles
Smart, Albra Mary	S.,	A	Santa Ana
Smart, Georgia U.	F.,	A	Los Angeles
Smith, Alta Dutton	F.,	A	Los Angeles
Smith, Bert C.	F.,	A	Peunel Rock, Kan.
Smith, Donnell Jefferson	S.,	A	Mukillio, Wash.
Smith, Emma Elizabeth	F.,	A	Monrovia
Smith, Ethelynne Marie	Sr.,	A	Long Beach
Smith, F. Marion	J.,	A	Hollywood
Smith, Mabel E.	Sr.,	A	Los Angeles
Smith, Margaret H.	Sr.,	A	Los Angeles
Smith, Stephen Lloyd	J.,	A	Los Angeles
Smith, Wayne Roe	F.,	A	Glendale
Smith, Wesley Vance	J.,	A	Eagle Rock
Snell, Ida Lillian	U.,	A	Los Angeles
Snowden, Margaret	Sr.,	A	Los Angeles
Snowden, Mildred Emma	Sr.,	A	Los Angeles
Snyder, Albert Byron	U.,	A	Azusa
Snyder, Cred Duward	F.,	S	Los Angeles
Snyder, Elizabeth	J.,	A	Los Angeles
Sowden, Harry	J.,	A	Los Angeles
Spaeth, Walter Herbert	J.,	A	Los Angeles
Spalty, Anna A.	J.,	A	Los Angeles
Spare, Edith Claire	F.,	A	Los Angeles
Sparks, Bessie Beatrice	F.,	A	Los Angeles
Spaulding, Irving M.	J.,	A	Pasadena
Specht, Martha Helen	Sr.,	A	Los Angeles
Speer, Carl A.	F.,	A	Los Angeles
Sprague, Lora	S.,	A	Long Beach
Sprenger, Florence H.	Sp.,	—	Los Angeles
Squire, James Herbert	J.,	A	Los Angeles
Stagg, Ira James	F.,	A	Anaconda, Mont.
Stagg, Samuel Wells	F.,	A	Los Angeles

Stannard, Ronald F.	S.,	A	South Pasadena
Starr, C. Raymond	F.,	A	Los Angeles
Steelman, Samuel	F.,	A	Los Angeles
Steinberg, Vera	Sr.,	A	Los Angeles
Stevens, W. Leslie	F.,	A	Grand Junction, Col.
Stever, M. Belle	U.,	A	Los Angeles
Stewart, Lucy Ellen	F.,	A	Santa Monica
Stinson, Ernest Claire	Sp.,	—	Los Angeles
Stillwell, Bettina	Sp.,	—	Los Angeles
Stilwell, Katharine Harriet	J.,	A	Los Angeles
St. John, Lloyd Levi	F.,	A	Los Angeles
Stofflet, Mary Kathryn	F.,	A	Bishop
Stone, Archie Edward	F.,	S	Pasadena
Stone, Helen Marguerite	S.,	A	Gardena
Storey, J. Clement	S.,	A	Pasadena
Strickler, Willard M.	Sp.,	—	Long Beach
Strodley, John Morgan	F.,	A	Los Angeles
Struthers, Alice B.	U.,	A	Los Angeles
Stuart, Georgia	F.,	A	Los Angeles
Sunkel, Walter William	S.,	S	Tulare
Svenson, Lillian M.	U.,	A	Los Angeles
Swain, Kathleen	Sp.,	—	Whittier
Swift, Claude E.	Sr.,	A	Santa Ana
Sword, James Owen	Sp.,	—	Los Angeles
Taber, Jessie	J.,	A	Los Angeles
Tanquary, Grafton Pettis	S.,	A	Los Angeles
Taylor, Harriet L.	Sp.,	—	Hermosa
Taylor, John Arthur	F.,	A	Los Angeles
Taylor, Moselle Elson	F.,	A	Los Angeles
Tenneson, Rosemary E.	J.,	A	Los Angeles
Teschke, Fred W.	Sr.,	S	Los Angeles
Thayer, Vivian J.	Sp.,	—	Los Angeles
Thielen, Lillian R.	J.,	A	Los Angeles
Thomas, Margaret O.	Sp.,	—	Los Angeles
Thomas, Mary Alice	F.,	A	Riverside
Thomas, Virden L.	F.,	A	Los Angeles
Thomas, Walter Wilson	F.,	A	Jubbulpore, India
Thompson, Charles Sheldon	F.,	A	Ontario
Thompson, Earle P.	J.,	A	Burbank



Thompson, Edith Rawcliffe	J.,	A	Los Angeles
Thompson, Harold B.	F.,	A	Los Angeles
Thompson, Jane Mary	F.,	A	South Pasadena
Thompson, Lynn Eva	F.,	S	Los Angeles
Thomson, Earl J.	F.,	A	Long Beach
Thompson, Olney Mary	Sr.,	A	Gardena
Thomson, W. Irwin	J.,	A	Los Angeles
Thurber, Floyd F.	F.,	A	Los Angeles
Thurner, George Alfred	F.,	S	Los Angeles
Tilford, Roscoe Conkling	Sp.,	—	Los Angeles
Tracy, Reynaud P.	F.,	S	Los Angeles
Tretheway, Lucile D.	Sr.,	A	Riverside
Trotter, Fred Belrose	J.,	A	Sandymount, Dublin
Tsuda, Kazuya	J.,	A	Los Angeles
Tubbs, Frances E.	U.,	A	Santa Monica
Tucker, Harold William	F.,	A	Los Angeles
Turner, J. Robert	F.,	A	Hollywood
Turner, Mary Esther	F.,	A	Los Angeles
Tunison, Burnell R.	Sr.,	A	Los Angeles
Twanaga, Karl K.	Sp.,	—	Honolulu, Hawaii
Umetzu, Tozo	S.,	A	Los Angeles
Unoura, Kojiro	J.,	A	Los Angeles
Vales, Gonzalo Toledo	J.,	S	Philippine Islands
Van Aken, Helen C.	Sp.,	—	Los Angeles
Van Court, Carroll O.	Sp.,	—	Los Angeles
Vandercook, Roscoe C.	F.,	A	Los Angeles
Van Velzer, Francis Clare	F.,	A	Los Angeles
Vawter, Nellie	F.,	A	Santa Monica
Veale, Anita W.	Sp.,	—	Los Angeles
Vermilyea, Stanley T.	F.,	A	Los Angeles
Vivian, Robert Evans	J.,	A	Los Angeles
Wadsworth, Gladys F.	Sp.,	—	Los Angeles
Wadsworth, Shirley	Sp.,	—	Hammondsport, N.Y.
Wagner, Mrs. Winono	U.,	A	Los Angeles
Wahrenbrock, Erwin Earl	Sr.,	A	San Diego
Waldron, John H.	U.,	A	Corona
Walker, Annie L.	F.,	A	Hemet
Walker, Charles Z.	F.,	S	Long Beach
Walker, H. Lloyd	F.,	A	Ocean Park

Walker, Helen Yetta	S.,	A	Los Angeles
Wall, Ernest Arnold	F.,	A	Los Angeles
Wallace, Helen Harriet	S.,	A	Los Angeles
Waller, Lawrence J.	J.,	S	Anaheim
Ware, John Allen	S.,	A	Kingman, Ariz.
Warren, Eugene Austin	Sr.,	A	Los Angeles
Warren, Lucile Alice	S.,	A	Pasadena
Waterhouse, Richard G.	J.,	A	Los Angeles
Watkins, Anne	F.,	A	Los Angeles
Watkins, Edna	F.,	A	Los Angeles
Watkins, John Latimer	F.,	A	Los Angeles
Watkins, Warren Moore	S.,	A	Los Angeles
Watson, Homer K.	Sr.,	A	Los Angeles
Watson, Minnie T.	Sp.,	—	Los Angeles
Watson, Nita	S.,	A	San Bernardino
Watson, Ruth Lucia	S.,	A	Los Angeles
Watson, Walter Thompson	J.,	A	Los Angeles
Watson, Widney	S.,	A	Los Angeles
Weaver, Grace Evangeline	Sr.,	A	Los Angeles
Webb, William P., Jr.	Sp.,	A	Anaheim
Webster, Jean Marie	Sp.,	—	Los Angeles
Welch, Esther	S.,	A	Long Beach
Wellman, Coe R.	F.,	A	Anaheim
Wells, Esther E.	S.,	A	Los Angeles
Wells, George C.	F.,	A	Santa Ana
Wendt, Harvey Fredrick	S.,	A	San Gabriel
Wendt, Alvin William	J.,	A	San Gabriel
Wents, Edna L.	F.,	A	Holstein, Ia.
Wentworth, Eva	Sp.,	—	Pasadena
Werner, Erwin P.	Sp.,	—	Los Angeles
West, Lucy K.	Sp.,	—	Los Angeles
Whalian, Olive B.	Sr.,	A	Fingal, N. D.
Whang, George C.	F.,	A	Los Angeles
Wheatley, William D.	J.,	A	Los Angeles
Wheeler, Norma	Sp.,	—	Los Angeles
White, Mrs. Martie	S.,	A	Los Angeles
White, Rebecca H.	Sp.,	—	Los Angeles
White, W. E.	Sr.,	A	Los Angeles
Whiteman, Marion	F.,	A	Los Angeles

Whiting, Lillian V.	U.,	A	Los Angeles
Whittemore, Rex Avery	Sp.,	—	Redlands
Whittock, Mrs. Leila T.	U.,	A	Los Angeles
Wichman, Pauline Marie	S.,	A	Los Angeles
Wickersheim, Lyle Wm.	Sr.,	S	Fullerton
Widman, Norman	F.,	A	San Pedro
Wiggs, Anna Gertrude	U.,	A	Los Angeles
Wiggs, Edith Eolia	U.,	A	San Dimas
Wiggs, Hazel Helen	Sr.,	A	San Dimas
Wilcox, Paul Blaine	F.,	A	Long Beach
Wilfong, Carrie Brewer	Sp.,	—	Los Angeles
Wilke, Julian Otto	J.,	A	Pasadena
Wilkes, Mary Bernice	Sr.,	A	Los Angeles
Wilkinson, Hazel Clare	J.,	A	Los Angeles
Wilkinson, Nellie L.	S.,	A	Elko, Nevada
Will, Arthur J.	F.,	S	Los Angeles
Williams, Catherine E.	F.,	A	Los Angeles
Willcox, Lutie Louise	J.,	A	Los Angeles
Wilson, Daisyolah	S.,	A	Los Angeles
Wilson, Eric Randolph	Sp.,	—	Los Angeles
Wilson, Harry	F.,	S	Glendale
Wilson, Harry K.	F.,	A	Los Angeles
Wilson, N. R.	U.,	A	Los Angeles
Wilson, Winfred Ernest	J.,	S	Escondido
Wimberley, Olive	F.,	A	Whittier
Winbigler, Ernest Naylor	F.,	A	Santa Ana
Winder, Louise	S.,	A	Los Angeles
Wininger, Ruth	Sr.,	A	Los Angeles
Winterrowd, Ruby Mayme	F.,	A	Orange
Winters, Francis Joseph	F.,	S	Philadelphia, Pa.
Wishek, Esther Barbara	S.,	A	Ashley, N. D.
Witbeck, Louise A.	Sr.,	A	Los Angeles
Witherell, Grace Miriam	J.,	A	Los Angeles
Woehr, Ida Belle	J.,	A	Los Angeles
Woehr, Reginald	S.,	S	Los Angeles
Wood, Emma Lois	Sp.,	—	Los Angeles
Wood, Frances Ruth	S.,	A	Los Angeles
Woodhull, Carolyn	J.,	A	New Mexico
Woodruff, J. A.	U.,	A	Los Angeles

Woods, Harry Cottrell	J.,	A	Los Angeles
Woods, Ralph A.	S.,	A	Orange
Work, Cree Telford	S.,	A	Venice
Work, Florence Esther	Sr.,	A	Venice
Work, Mary Isabel	F.,	A	Venice
Wright, Natalie	S.,	A	Los Angeles
Wynne, Ina Ruth	Sr.,	A	Ontario
Yokayama, Tokiji	F.,	S	Los Angeles
Ziegler, Arthur N.	F.,	A	Long Beach
Zimmerman, John Robert	F.,	A	Los Angeles
Zuck, John Monroe	F.,	A	Palms

### GRADUATE DEPARTMENT

**Note**—The abbreviation “H.S.” refers to candidacy for the University Recommendation for the High School Teacher’s Certificate; “A.M.” to the Master of Arts Degree.

Abbott, Grace Mary Robertson, Ph.B.	
University of Chicago, 1909.....	
Abell, Edward LaRue, A.B.	
University of Michigan, 1914.....	Education, H.S., A.M.
Adams, Harry G., B.S.	
Kansas Normal College, 1898.....	Mathematics, H.S.
Adams, Lewis O., A.B., A.M.	
Asbury College, 1903.....	History, H.S.
Adams, Lucy Burwell, A.B.	
Southern California, February, 1915....	Mathematics H.S.
Aden, Fred, A.B.	
Southern California, 1915.....	History, H.S., A.M.
Aikin, Nanette Bradford, A.B.	
Wellesley College, 1911.....	Latin
Allen, Lawrence Winfield, A.B.	
Southern California, 1915.....	Economics
Anawalt, Ethel, A.B.	
Nebraska Wesleyan University, 1913.....	German, H.S.
Anderson, Hallam Hans, B.S.	
Southern California, 1915.....	Mathematics, H.S., A.M.
Arnold, Martha Margaret, A.B.	
Southern California, 1907.....	English

- Ayers, Arthur Carlton, A.B.  
Southern California, 1914..Economics, Sociology, A.M.
- Babson, Helen, A.B.  
Vassar College, 1905.....Sociology, A.M.
- Baker, John Rhea, A.B.  
Southern California, 1913..Economics, Sociology, H.S.
- Barnes, Hubert E., Ph.B.  
University of Redlands, 1915.....
- Barry, Esther May, A.B.  
Ottawa University, 1913.....History, H.S., A.M.
- Bartlett, Levantia White, A.B.  
Smith College, 1909.....English, H.S., A.M.
- Beeson, William James, A.M.  
Clark University, 1908.....
- Benefiel, G. J., A.B.  
Southern California.....Philosophy, H.S., A.M.
- Benson, Christine M., A.B.  
Southern California, August, 1915.....Sociology, H.S.
- Best, (Mrs.) Lucy Frances Smith, A.B.  
Southern California, August, 1914.....History, A.M.
- Bettinger, George Edward, A.B.  
Southern California, 1915.....English, H.S.
- Betts, Dorothy Ellen, A.B.  
Southern California, February, 1915....Mathematics, H.S.
- Biddulph, Herbert Kemp, B.S.  
Greenville College, 1910.....Botony, H.S.
- Bishop, Ernest George, A.B.  
Southern California, 1915.....Economics, H.S., A.M.
- Blanchard, Mary Willard, A.B.  
Mount Holyoke College, 1907.....Hitory, A.M.
- Bliss, Anna, A.B.  
Stanford University, 1914.....German
- Bloom, Felicitas, A.B.  
Southern California, February, 1915.....German, H.S.
- Bloom, Mercedes, A.B.  
Southern California, February, 1915.....German, H.S.
- Blum, Edith, A.B.  
Southern California, February, 1916.....English, H.S.
- Bogan, Phebe May (Mrs.), A.B.  
University of Arizona, 1911.....Spanish, H.S.
- Bolton, Hazel Marie, A.B.  
Smith College, 1914.....History, H.S.



- Bostwick, Norris, B.S. in C.E.  
Southern California, 1913.....C. E., H.S., A.M.
- Bouelle, Frank August, A.B.  
Southern California, 1912.....Education
- Brown, Arthur C., A.B.  
Southern California, 1915.....Education, H.S.
- Brubaker, Nicholas J., A.B.  
Southern California, February, 1915.....History, H.S.
- Bruckman, Edith Louise, A.B.  
Southern California, 1909.....French, A.M.
- Bryson, Frederick Robertson, A.M.  
Harvard University, 1902.....
- Bundy, Sarah Elizabeth, A.B.  
Stanford University, 1910.....Sociology, H.S.
- Bunnell, Sarah Elecia, Ph.B.  
Brown University, 1889.....German, H.S., A.M.
- Burdorf, Sophie Margaret, B.L.  
University of California, 1906.....German, A.M.
- Burke, John C., B.S.  
Loyola College, 1912.....Philosophy, H.S.
- Burnight, Lillian Alice, A.B.  
Southern California, 1913.....English
- Burr, Clifford Fulton, A.B.  
Southern California, February, 1916.....Spanish, H.S.
- Burr, Merrill Jackson, A.B.  
Oberlin College, 1907.....History, H.S., A.M.
- Campbell, Margaret M., B.S.  
Columbia University, 1911.....Education
- Carlisle, Malvina Malter, A.B.  
Southern California, 1915.....German
- Calef, Evelyn L., B.S.  
Columbia University, 1911.....
- Canepa, Mary Illeonore, A.B.  
Southern California, February, 1916.....French, H.S.
- Chamberlin, Clifford Dana, A.B.  
McKendell College, 1898.....Spanish, H.S.
- Champion, Grace, A.B.  
Stanford University, 1915.....History, H.S., A.M.
- Chapman, Hannah, B.S.  
Valparaiso University, 1902.....History
- Christian, Alpha, B.L.  
Hardin College, 1898.....History, H.S., A.M.

- Clark, Archie B. Clifford, A.B.  
Greenville College, 1914.....History, H.S.
- Clark, Essie Maud, A.B.  
Southern California, 1915.....History, H.S.
- Clark, Lola Bliss, A.B.  
Southern California, 1913.....English, H.S.
- Clark, Mary Agnes, A.B.  
Southern California, 1915.....English, H.S.
- Clifton, Archie Roy, Ph.B.  
University of Wisconsin, 1908.....Education, A.M.
- Clyne, Marguerite Elizabeth, A.B.  
Leland Stanford Junior University, 1914.....History, H.S.
- Cocks, Edna Agnes, A.B.  
Southern California, 1911.....Biology, A.M.
- Colestock, Mary Alice, A.B.  
Southern California, February, 1915.....Economics, H.S.
- Coller, Helen Amada, A.B.  
Wellesley College, 1913.....English
- Colver, Mary C., A.B.  
University of Michigan, 1894.....Education
- Colville, Blanch, A.B.  
Fairmount College, 1906.....Mathematics, H.S.
- Cookman, Alfred, A.B.  
Southern California, February, 1916.....Zoology, H.S.
- Coomber, Doris Patricia, A.B.  
Southern California, 1915.....Botany, H.S., A.M.
- Coulter, Mary Emma, A.B.  
Pennsylvania College for Women, 1909.....English
- Cox, Ernest Lester, A.B.  
Southern California, 1915.....History, H.S., A.M.
- Cox, Gertrude M., A.B.  
Whittier College, 1912.....Zoology, H.S., A.M.
- Crow, Emma Owena, A.B.  
Southern California, February, 1916.....History, H.S.
- Daily, Ross Hart, B.S.  
Grove City, 1905.....Botany, H.S.
- Davis, Ralph E., A.B.  
Southern California, 1915.....Sociology, A.M.
- Davis, Thomas H., A.B.  
Southern California, 1915.....Botany, H.S., A.M.
- Deaver, Charles Leon, A.B.  
Southern California, 1914.....History, A.M.

- Dessaint, Edna, A.B.  
University of Wisconsin, 1903.....Latin, H.S.
- Dolley, Helen Edna, A.B.  
Southern Cal., Feb., 1915....Economics, Latin, H.S., A.M.
- Dupuy, Florence, A.B.  
Leland Stanford Junior University, 1914....German, H.S.
- Dutcher, Thomas A., A.B.  
Whitman College .....Mathematics
- Duvall, Pauline, A.B.  
Southern California, August, 1915.....Mathematics, H.S.
- Early, Della Totten, A.B.  
Southern California, February, 1916.....History, H.S.
- Eby, (Mrs.) Emma B., A.B.  
Otterbein University, 1903.....
- Edwards, Eugene Jonathan, A.B.  
William Jewell College, 1900.....English, A.M.
- Eger, Mary Neff, A.B.  
Nebraska Wesleyan University, 1911.....German, H.S.
- Eveland, Ruth Lucile, A.B.  
Southern California, February, 1916.....German, H.S.
- Farrington, Efner Augustus, A.B.  
Oberlin College, 1886.....Chemistry, A.M.
- Fisher, Lillian E., A.B.  
Susquehanna University, 1912.....History, A.M.
- Fisher, Helen G., A.B.  
Susquehanna University, 1913.....Mathematics, H.S.
- Fitch, Aura L., A.B.  
Southern California, 1915.....Zoology, H.S.
- Foley, Louis Frank, B.S.  
Ohio Wesleyan University, 1910.....Mathematics, H.S.
- Foote, Stanley Stilwell, A.B.  
Southern California, 1914.....Biology, H.S.
- Foster, Emory Alfred, A.B.  
Southern California, 1915.....English, H.S.
- Freeland, Alta Lucinda, A.B.  
Greenville College, 1913.....Latin, H.S.
- Furber, Marion Ruth, A.B.  
Southern Cal., Feb., 1916.....Mathematics, German, H.S.
- Gardiner, Dorothy Margaret, A.B.  
Mount Holyoke College, 1911.....English, H.S.
- Gardner, Eleanor Adelaide, A.B.  
Southern California, Feb., 1916..Mathematics, H.S., AM.

- Gaw, Ethelean Tyson, A.B.  
Southern California, 1914.....English, H.S.
- Gauthier, Eugene Robert, A.B.  
Bates College, 1906.....Chemistry, H.S.
- Gill, Alice Berry, A.B.  
Southern California, 1915....Philosophy and Botany, H.S.
- Gilbert, Mabel Alice, A.B.  
Southern California, February, 1916.....English, H.S.
- Gillaspie, J. A., A.M.  
Drake University, 1905.....
- Gleiss, Irene Edyth, A.B.  
Southern California, Feb., 1916.....German, H.S., A.M.
- Goodenow, Frances G., A.B.  
University of California, 1901.....Spanish
- Goodsell, Joy G., A.B.  
Southern California, 1912.....Physics, A.M.
- Goodwin, Ralph Talbott, A.B.  
Southern California, Feb., 1915....Chemistry, H.S., A.M.
- Grabill, Mildred Ruth, Ph.B.  
Drake University, 1906.....English, H.S.
- Grant, Garnet Berke, B.S.  
University of California, 1911.....Physiology, A.M.
- Graves, George W., Ph.B.  
University of Chicago, 1908.  
State College of Washington, M.S.....Agriculture, H.S.
- Greene, Marion Shillingford, A.B.  
Southern California, 1915.....History, H.S., A.M.
- Greene, (Mrs.) Vivian Rice, A.B.  
Whittier College, 1913.....Spanish, H.S., A.M.
- Griffin, Clementina de Forest, A.B.  
Vassar College, 1909.....
- Hall, Mary E. L., B.S.  
Kansas Agricultural College, 1904.....Chemistry
- Handy, Leva M., A.M.  
Toronto University, 1909.....Sociology
- Hansen, Astrid Jenny Aurora, A.B.  
Southern California, February, 1916.....German, H.S.
- Hartshorn, Edna, A.B.  
Pomona College, 1912.....German, H.S.
- Harvey, Fern Mildred, A.B.  
University of Manitoba, 1913.....French, H.S.

- Hatfield, Clara C., A.B.  
Southern California, 1914.....History
- Hawkins, Clarice Eudora, A.B.  
Maryville College, 1910.....English, H.S.
- Haydock, Earl Henry, A.B.  
Southern California, 1914.....History, H.S., A.M.
- Haynes, Diantha May, A.B.  
Leland Stanford Junior University, 1905..Biology, A.M.
- Hedstrom, Esther Vendle, A.B.  
Southern California, February, 1916.....History, H.S.
- Hermans, Mabel, A.B.  
Leland Stanford Junior University, 1911.....H.S.
- Herrick, Mary L., A.B.  
University of Minnesota, 1899.....Spanish
- Hibbard, Elizabeth, A.B.  
Southern California, 1915.....History, H.S.
- Hickman, Mary Irene, B.S.  
Illinois Wesleyan University, 1893.....H.S.
- Hickson, Hazel, A.B.  
Pennsylvania College for Woman, 1912.....English, H.S.
- Higgins, Elmer, A.B.  
Southern California, February, 1916.....Zoology, H.S.
- Hill, Stephania Eleanor, A.B.  
Southern California, February, 1915.....English, H.S.
- Hills, Henry Merritt, A.B.  
Oberlin College, 1898.....Chemistry
- Hoagland, Bessie Mildred, A.B.  
Southern California, 1915.....History and Sociology, H.S.
- Hodgkins, Edith May, A.B.  
Southern California, 1915.....
- Hodson, Ross N., A.B.  
Southern California, 1915.....Econ., Soc., H.S., A.M.
- Holland, Leland William, A.B.  
Southern California, Feb., 1916.....Math., Physics, H.S.
- Hollingsworth, Josephine Bacon, A.B.  
Tulare College, 1910.....Economics, Sociology, A.M.
- Humphrey, Gertrude L., A.B.  
Goucher College, 1910.....English, H.S.
- Hurlbut, Mazie Jeanette, A.B.  
Southern California, 1915.....Latin, H.S.
- Hutchinson, Edith May, A.B.  
Stanford University, Dec., 1913.....History, H.S.



- Ingersoll, Caroline Maude, A.B.  
Southern California, February, 1916.....History, H.S.
- Irvine, Cecilia Robertson, A.B.  
Southern California, 1915.....History, H.S., A.M.
- Jackson, Mabel Clare, A.B.  
University of Illinois, 1915.....English, H.S.
- Janes, Errol Prosser, A.B.  
Southern California, 1914....Econ., Sociology, H.S., A.M.
- Jansen, Cornelius, A.B.  
University of Nebraska, 1888.....A.M.
- Jenkins, Alfred Kendall, Ph.B., Pd.B.  
Hillsdale College, 1898.....English, A.M.
- Johnson, Alice Hannah, A.B.  
Smith College, 1905.....German, H.S.
- Johnson, Edward E., B.S.  
Carroll College, 1910.....Chemistry, H.S.
- Johnston, Allegra Ellis, A.B.  
Southern California, 1915.....German, H.S.
- Johnston, Bonnie Clyde, A.B.  
Greenville College, 1911.....History, A.M.
- Johnston, Charles Sale, A.B.  
Occidental College, 1915.....English, H.S.
- Jones, Bessie Helen, A.B.  
Southern California, February, 1916.....Spanish, H.S.
- Juel, Cora A., A.B.  
University of Minnesota, 1913.....German, H.S.
- Kahl, Frances Antoinette, Ph.B.  
University of Chicago, 1913.....English, H.S., A.M.
- Kalliwoda, Helen, A.B.  
Southern California, 1915.....French, H.S.
- Kelly, Julia Mae, A.B.  
Southern California, 1915.....History, H.S.
- Kemper, Helen Elizabeth, A.B.  
Occidental College, 1915.....English, H.S.
- Kersey, Vierling, A.B.  
Southern California, Feb., 1916....Education, H.S., A.M.
- Kessler, Ernest Edward, A.B.  
Southern California, 1914.....Physiology, A.M.
- Kuhl, Lora, A.B.  
Vassar College, 1911.....Latin, German, H.S.
- Langworthy, Lester Raymond, A.B.  
University of California, 1915.....Education, H.S.

- Leland, Anna, B.S.  
Columbia University, 1911.....
- Leonard, Alexander Thomas, Jr., A.B., B.S.  
University of Santa Clara, 1910  
University of California, 1911.....Physiology, A.M.
- Lenvig, Bessie C., A.B.  
Southern California, 1915.....History, H.S.
- Lightner, Daniel Roy, A.B.  
Southern California, 1914.....Economics, H.S.
- 'Livengood, Frances, A.B.  
Leland Stanford Junior University, 1913..English, H.S.
- Locke, Ruth May  
Southern California, 1915.....Mathematics, H.S.
- Lodwick, Dua, Ph.B.  
Iowa State University, 1901.....A.M.
- Loly, Kathleen Dorothy, A.B.  
Southern California, 1912..Latin and Mathematics, A.M.
- Long, Wilbur H., A.B.  
Southern California, Feb., 1916....Economics, Soc., H.S.
- Longmoor, Walter Moffott, A.B.  
Southern California, Feb., 1916....Economics, Soc., H.S.
- Love, Roma Louise, A.B.  
Wellesley College, 1908.....German, H.S.
- MacDougel, Jean, A.B.  
Occidental College, 1910.....Latin
- MacIntyre, Carlyle Furen, A.B.  
Southern California, 1916.....English, H.S., A.M.
- Mack, Beatrice, A.B.  
Grinnell College, 1913.....English, H.S.
- Mackey, Maryette Goodwin, A.B.  
Wellesley College, 1888.....English, H.S., A.M.
- Marks, Inez May, A.B.  
Southern California, February, 1916.....History, H.S.
- Marsh, Linnie May, A.M.  
Radcliffe College, 1907.....English
- Marti, Oscar A., B.S.  
College of Philomoth, 1905.....History, H.S., A.M.
- Martin, Homer, A.B.  
Leland Stanford Junior University, 1903..German, A.M.
- Martin, Samuel Babbitt, B.S.  
University of Pennsylvania, 1908.....
- Marvin, Cloyd Heck, A.B.  
Southern California, Feb., 1915....Economics, H.S., A.M.

- Masters, Queen Elizabeth, A.B.  
Southern California, 1915.....English, H.S.
- Mathews, Mabel Laura, A.B.  
Mt. Holyoke College, 1906.....History, A.M.
- Mattoon, Everett Warren, A.B.  
Southern California, 1914.....Econ., Soc., H.S., A.M.
- Mauzy, Jessie Ethel, A.B.  
Southern California, 1915.....Zoology, H.S.
- Mealy, Roy Everett, A.B.  
Southern California, 1909.....History
- Means, J. Worthington, A.B.  
Whittier College, 1914.....History, A.M.
- Mentzer, Marion Amanda, A.B.  
Southern California, February, 1915.....Latin, H.S.
- Merrihew, Maud Leonara, Ph.B.  
University of Vermont, 1902.....Latin, H.S., A.M.
- Min, Chas., H.S., A.B.  
Southern California, Feb., 1916.....Education, A.M.
- Minear, Augustus Clay, A.M.  
Northwestern University, 1902.....Chemistry
- Monroe, Daisy Lee, B.L.  
University of California, 1913.....
- Moore, Erward Johnston, A.B.  
Geneva College, 1909.....
- Moore, Horace Wood, A.B.  
Baker University, 1913.....History, H.S.
- Mowry, Guy Leroy, A.B.  
University of Michigan, 1911.....Agriculture, H.S.
- Muller, S. Margarethe, A.B.  
Southern California, 1914.....English, H.S.
- Multhauf, Luie G., B.S.  
Southern California, 1914.....Mathematics, H.S.
- Myler, (Mrs.) Mertha Peters, B.L.  
Alma College, 1898.....Mathematics, H.S.
- Myrick, Stephen Stanton, B.L.  
Earlham College, 1894.....History, A.M.
- McCann, Reva Irene, A.B.  
Leland Stanford Junior University, 1915.....English, H.S.
- McClellan, Ada Angeline, B.S.  
University of Chicago, 1915.....Mathematics, H.S.
- McDermott, Ora Martina, A.B.  
Leland Stanford Junior University, 1912.....English

- McDonald, George James, A.B.  
Southern California, February, 1915.....Education, A.M.
- McDowell, Hazel Althea, A.B.  
Indiana University, 1911.....Education, H.S.
- McEuen, Fred Lee, A.B.  
Southern California, February, 1915....Mathematics, H.S.
- McKay, Isabella Jean, A.B.  
Southern California, 1914.....History
- McKelvey, Helena Theresa, A.B.  
Occidental College, 1915.....Latin, H.S.
- McNeely, John Knox, B.S.  
University of California.....Electrical Eng., A.M.
- Nagata, Samuel, A.B.  
Whittier College, 1915.....Philosophy
- Nakamura, Kansuke, A.B.  
Waseda University, 1901.....Philosophy, A.M.
- Nash, Mary Vera, M.A.  
Glasgow University, 1914.....German, H.S.
- Nattkemper, Leonard Gustave, A.B.  
Southern California, 1914.....Education
- Nave, Junia, A.B.  
Ohio Wesleyan University, 1914.....Sociology
- Nelson, Nora Allen, A.B.  
Occidental College, 1913.....French, H.S.
- Netz, Joseph, A.B.  
Southern California, 1915....Economics, Sociology, A.M.
- Nichols, Loyd Patterson, A.B.  
Southern California, 1911....Economics, Sociology, A.M.
- Noble, Dora Ursula, A.B.  
Southern California, 1914.....Botany, H.S.
- Northrop, Margaret Luella, A.B.  
Southern California, 1915.....Zoology, H.S.
- Nutter, Marjorie Alma, A.B.  
Western Reserve University, 1912.....German, A.M.
- Oerter, Eunice, A.B.  
Southern California, 1915.....German, H.S.
- Padgham, Henry Irving, B.S.  
Oregon Agricultural College, 1914.....Botany, H.S.
- Parkinson, Mora Marie, A.B.  
University of Michigan, 1910.....French, H.S., A.M.
- Perkins, Amy Seamans, A.B.  
Boston University, 1910.....English, H.S.

- Perkins, Frances Louise, A.B.  
Southern California, Feb., 1916.....Math., Latin, H.S.
- Perry, Earl H., A.B., B.D.  
Whittier College, 1907  
MacLay College of Theology, 1911.....History, H.S.
- Perry, Susan Hammill, A.B.  
Southern California, 1915.....German, H.S.
- Pierce, Juliet Rich, A.B.  
Southern California, 1915.....English, A.M.
- Peterson, Harry Russ, A.B.  
Harvard University, 1912.....English
- Pinnell, Homer Francis, A.B.  
Southern California, August, 1914..Sociology, H.S., A.M.
- Poggi, Mary Josephine, A.B.  
Southern California, 1914....Economics, Sociology, H.S.
- Porter, Roy, A.B.  
Southern California, Feb., 1916.....Economics, H.S.
- Rathjen, Edwin Frederick, A.B., A.M., Ph.D.  
Wisconsin University (A.B., A.M.)  
Cornell University (Ph.D.), 1910.....Chemistry
- Read, Marianna, A.B.  
University of Pennsylvania, 1911.....Latin, A.M.
- Read, Wendell Phillips, A.B.  
Southern California, 1915.....History, H.S., A.M.
- Reams, Edward Arnold, A.B., A.M.  
Kansas Wesleyan University, 1913  
Columbia University (A.M.), 1914.....History, H.S.
- Reaves, Bessie Franklin, A.B.  
Southern California, 1915.....English, A.M.
- Redden, Albert, A.B.  
University of Arkansas, 1908.....History, H.S.
- Redman, A. R., B.S.  
Armour Institute of Technology, 1905.....German, H.S.
- Richards, John A., B.S.  
Kansas State Agric. College, 1909.....Mech. Eng., H.S.
- Richards, Ethel Estella, A.B.  
Southern California, 1915.....History, H.S.
- Richey, Bernice, A.B.  
Southern California, 1915.....Mathematics, H.S.
- Rice, Nettie Belle, A.M.  
Southern California, 1913.....
- Riddle, Grace, A.B.  
Goucher College, 1914.....French, H.S.



- Rittenour, Floyd Isaac, B.S.  
Ohio Wesleyan University, 1907.....Chemistry
- Ritter, Harvey Roger, A.B.  
Southern California, 1915....Economics, Sociology, H.S.
- Robertson, Jessie Thacher, M.L.  
University of California, 1906.....English
- Rowland, Marguerite Helen, A.B.  
Southern California, 1915.....Spanish, H.S.
- Russell, Tom A., B.Ped.  
Missouri State Normal School, 1912.....English
- Rymer, Harriet Missouri, A.B.  
University of Nebraska, 1912.....English, H.S.
- Saleen, Herman Ernst, A.B.  
Bethany College, 1913.....Chemistry, H.S., A.M.
- Samuelson, Verna Rosalind, A.B.  
Northwestern University, 1912.....Latin, H.S.
- Savage, Henry I., B.S.  
Oregon Agriculture College, 1914.....H.S.
- Schmitt, Katherine Cecil, A.B.  
Southern California, 1915.....German, A.M.
- Schoenau, William H., Jr., A.B.  
Southern California, 1915.....Economics, A.M.
- Scott, Ethel Augusta, A.B.  
University of Nebraska, 1912.....Latin, H.S.
- Seckler, Elsie (Mrs.), A.B.  
Southern California, 1915..German and Education, H.S.
- Shaw, Mary, B.S.  
Coe College, 1913.....English, H.S.
- Shea, Katherine Baker, B.S.  
University of California, 1915.....Chemistry, H.S.
- Shidler, Lois, A.B.  
Southern California, Feb., 1915.....History, Soc., H.S.
- Shields, Fred James, A.B.  
Nazarene University .....Philosophy, A.M.
- Shultz, Myrtle, A.B.  
Southern California, February, 1916.....English, H.S.
- Silver, Andrew Morgan, A.B.  
Southern California, 1915.....Spanish, H.S.
- Silver, Selena, A.B.  
Southern California, 1915.....English, H.S., A.M.
- Smith, Alice, Ph.B.  
University of Chicago, 1907.....Mathematics, H.S.

- Smith, Carrie Belle, Ph.B.  
Western Reserve University, 1902—History, H.S., A.M.
- Smith, Edwin Oscar, A.M.  
McKendree College, 1909.....
- Smith, Eleanor Humphrey, A.B.  
University of Kansas, 1903.....English
- Smith, Isabel, A.B.  
Bryn Mawr College, 1915..Geology and Chemistry, H.S.
- Smith, William, A.B., A.M.  
Grand Island, 1907  
University of Chicago (A.M.), 1912.....Sociology, H.S.
- Snyder, Charles Heath, B.S.  
Valparaiso University, 1909.....Sociology, A.M.
- Snyder, Helen D., A.B.  
Southern California, 1915.....German, A.M.
- Snyder, William Henry, A.B., A.M., D.Sc.  
Colby College, 1885  
Harvard, 1888, 1906.....
- Sokoloff, Lillian, A.B.  
Southern California, Aug., 1915....Sociology, Econ., H.S.
- Specht, Martha Helen, A.B.  
Southern California, Feb., 1916.....German, H.S.
- Sprotte, Charles William, B.S.  
Southern California, 1915.....Mathematics, H.S.
- Somers, Gladys Mary, A.B.  
Pomona, 1907.....English, H.S.
- Steffy, Eva Pearl, A.B.  
Southern California, 1911.....History
- Steele, Martha Lee, A.B.  
Southern California, 1915....Economics, Sociology, H.S.
- Stevenson, (Mrs.) Edith Leiper, A.B.  
Wittenberg College, 1896.....English, H.S.
- Stevenson, Philo S., A.B.  
University of Washington, 1894.....Education
- Stimson, Ethel, A.B.  
Smith College, 1910.....French, H.S.
- Stonier, Harold James, A.B.  
Southern California, 1913.....History, A.M.
- Stone, Ruth Atherton, A.B.  
Stanford University, 1915.....Mathematics
- Stowell, Roy Sherman, A.M.  
Cornell University, 1903.....

- Swift, Claude Earl, A.B.  
Southern California, Feb., 1916....Chemistry, H.S., A.M.
- Tanquary, Grafton Pettis, A.B.  
Southern California, Feb., 1916....Econ., Soc., H.S., A.M.
- Teall, Robert James, A.B.  
Beloit College, 1900.....Education and Sociology, A.M.
- Theobald, Harry Couch, A.B.  
Stanford University, 1910.....Spanish
- Tice, Eldon Webb, A.B.  
Washburn College, 1906.....Physiology, A.M.
- Tilroe, Welcome Agnes, A.B.  
Southern California, 1914.....Latin, A.M.
- Torrance, Arthur Frederick, A.B.  
Southern California, 1915.....Philosophy, H.S., A.M.
- Towner, Mabel Vesta, A.M.  
University of Iowa, 1909.....English
- Tritt, Jessie Amelia, A.M.  
Southern California, 1915.....History
- Tucker, Margaret Muriel, A.B.  
Southern California, 1915.....Latin, H.S.
- Tucker, Mary Frances, A.B.  
Stanford University, 1899.....German
- Tunison, Burnell, A.B.  
Southern California, Feb., 1916....Chemisttry, H.S., A.M.
- Twining, Harry La Verne, A.B.  
Southern California, 1906.....Physics
- Van Aken, Leota Carleton, A.B.  
Southern California, 1915.....French, H.S.
- Van Dyke, Lillian, B.L.  
University of California, 1912.....History, H.S.
- Vermink, George Albert, A.B.  
Morningside College.....Sociology, A.M.
- Vinson, Mabel Nelle, A.B.  
Greenville College, 1915.....Mathematics, H.S.
- Walker, Ethel Vida, B.S.  
Oklahoma College, 1902.....English, A.M.
- Wallace, James Edwin, B.S.  
University of California, 1912.....Physics, H.S.
- Ward, Virgil H., A.B.  
Whittier College, 1915.....Chemistrty, H.S.
- Warren, Curtis Elmer, A.B.  
Southern California, 1915.....History, H.S.

- Watkins, Fred Arthur, A.B.  
Southern California, 1915.....
- Weatherhead, Ray Eugene, B.S.  
Pacific College, 1914.....Mathematics, H.S.
- Weaver, Royal Arthur, A.B., B.D.  
Southern California, 1906  
Drew Theological Seminary, 1909.....Spanish, H.S.
- Webber, Fern Margaret, A.B.  
Knox College, 1913.....History, H.S.
- Wellborn, Maida, A.B.  
Southern California, 1915.....Sociology
- White, Helen, B.S.  
Iowa State College, 1913.....Chemistry, H.S.
- Wieman, Lois Hazel, A.B.  
Occidental College, 1913.....English, H.S.
- Wilde, Edith La France, B.S.  
Occidental College, 1913.....English, H.S.
- Wilde, Edith La France, B.S.  
Wellesley College, 1910.....English, H.S., A.M.
- Wilder, Glen, A.B.  
Indiana University, 1915.....History, H.S.
- Wilcox, Vivian Elma, A.B.  
Southern California, 1915.....Botany, H.S.
- Wilkinson, Roy Albert, A.B.  
Southern California, 1912..Spanish, German, H.S., A.M.
- Wilson, Byson Henry, A.B.  
Philomath College, 1913.....Philosophy, A.M.
- Willcox, Vivian Elma, A.B.  
Southern California, 1915.....Botany, H.S.
- Williams, Frances Evelyn, A.B.  
Whittier College, 1911.....English, H.S.
- Wininger, Ruth, A.B.  
Southern California, February, 1916.....Zoology, H.S.
- Wood, Agnes, A.B.  
Southern California, 1915.....Mathematics, H.S.
- Wood, Alice Lank, A.B.  
Drake University, 1903.....
- Woods, Walter Allen, B.S.  
Pennsylvania State College, 1904.....
- Wright, Mabel Lavina, A.B.  
Southern California, 1915.....History, H.S.
- Wyatt, Jane Dillon, A.B.  
Southern California, 1915.....Mathematics, H.S., A.M.

Wyman, Gertrude B., A.B.	
Southern California, 1913.....	English, H.S.
Yashima, Chuizo, A.B.	
Southern California, 1915.....	Philosophy, A.M.
Yeretzian, Aram S., Ph.B.	
University of Chicago, 1909.....	Sociology
Yocum, Stella Frances, A.B.	
Southern California, 1915.....	Mathematics, H.S.
Yocum, Zella Mae, A. B.	
Southern California, 1915.....	Mathematics, H.S.
Zerell, Frances Magdaline, A.B.	
Southern California, 1915.....	German, H.S.

### SUMMER SESSION, 1915

Abbott, Grace Mary (Ph.B.)	Bay, Clella A.
Abell, Edward La Rue (A.B.)	Beckett, Theresa
Adams, Frances Ellis	Beckett, Wilbur Archer
Adams, Harry G.	Benefield, G. J.
Adams, Louis O. (A.B.)	Benson, Christine M.
Adams, Lucy Burwell	Bertrand, Mary E. Cameron
Aiken, Nanette B. (A.B.)	Betts, Dorothy Ellen (A.B.)
Altman, Harry H.	Betts, D. Ethel
Anawalt, Ethel M. (A.B.)	Biddulph, Herbert K. (B.S.)
Anderson, Hallam Hans	Bissiri, Attilio Albino
Andres, Stella Clare	Blank, John Philip
Angier, Carroll Waite	Bloom, Felicitas M. (A.B.)
Arata, Winfield Hector	Bloom, Mercedes E. (A.B.)
Arnold, Martha M. (A.B.)	Blum, Edith
Ayers, Arthur Carlton (A.B.)	Bogan, Phele M. (A.B.)
Bacon, Ethel	Borum, J. Francis
Bailey, Charles A.	Bostwick, Genevieve
Baker, Isabelle	Bouelle, Frank A. (A.B.)
Baker, John Rhea (A.B.)	Bower, May Epler
Baker, Mary E.	Boyd, Lillian Cecelia
Barnard, Ralph Emerson	Boyer, Fred Augustus
Barris, Susannah G.	Brennan, Catherine Agnes
Bartlett, Levantie W. (A.B.)	Brewer, Mary Irene



- |                              |                             |
|------------------------------|-----------------------------|
| Brodbeck, Mary               | Claypool, Mary F.           |
| Brown, Arthur C.             | Clement, Hubbard Thomas     |
| Brown, Earl Travis           | Clifton, Archie Roy (Ph.B.) |
| Browning, Mary Leona         | Colburn, Walter E.          |
| Brubaker, Martha M.          | Coller, Helen A. (A.B.)     |
| Brubaker, Harriett M.        | Colver, Mary (A.B.)         |
| Bruckman, Edith L. (A.B.)    | Conaty, Joseph, Jr.         |
| Brubaker, Nicholas J. (A.B.) | Cone, Gladys Myra           |
| Brunson, Claire Benton       | Cook, Charles F.            |
| Brydolf, Nella J.            | Cookman, J. Randolph (A.B.) |
| Bryson, John A. (LL.B.)      | Corlett, Eva                |
| Bullock, Albert Ernest       | Crabill, Hazel Dell         |
| Bullock, Frederick W.        | Crandal, Jesse R.           |
| Bunnell, Sarah E. (Ph.B.)    | Crow, Emma Owena            |
| Burke, Martha Coral          | Culp, Blanche (A.B.)        |
| Burnight, E.R.               | Dalton, Margaret E.         |
| Burnight, Lillian A. (A.B.)  | Daries, Christine A.        |
| Burns, Daisy Marguerite      | Dauner, Nannette            |
| Burns, Phil Sheridan         | Dauids, Mark                |
| Burr, Clifford Fulton        | Davis, Corinne              |
| Calef, Evelyn L. (B.S.)      | Davis, Eleanor Madeline     |
| Cameron, Una B.              | Davis, Ida                  |
| Campanari, Mrs. L.           | Davis, Ralph Emerson        |
| Campbell, A. Janet           | Deaver, Charles L. (A.B.)   |
| Campbell, Margaret M. (B.S.) | Deck, Mrs. Rosa Jaime       |
| Carlisle, Fred B.            | Dennis, Alice Ruberta       |
| Carlisle, Malvina D. Malter  | Dessaint, Edna (A.B.)       |
| Carse, Herbert Elwin         | Dowell, Annie E.            |
| Chamberlin, C. D. (A.B.)     | Dubin, Jennie               |
| Chamberlen, F. Thomas        | Duncan, Carol A.            |
| Chapin, Charles              | Duncan, Lois                |
| Chapman, Hannah L. (B.S.)    | Dunham, Inez Dorothy        |
| Chase, Vera Alta             | Dunlap, Mary Elizabeth      |
| Cheek, Bertha                | Dupuy, Florence M. (A.B.)   |
| Chung, Elbert                | Duvall, Pauline             |
| Clark, Archie B. (A.B.)      | Eads, Robert J.             |
| Clark, J. Hunter             | Eby, Mrs. Emma B. (A.B.)    |
| Clark, Lola Bliss (A.B.)     | Elwin, Gertrude Phillips    |
| Clark, Mary Agnes A.B.)      | Epley, James F.             |

- Evans, Adward Manfield  
Ewing, Bessie Ionia  
Faries, Culbert William  
Farrel, Joe Webster  
Feeler, William Henry  
Felsenthal, Louis  
Fitch, Aura L. (A.B.)  
Flowers, Mary La Belle  
Foley, Louis Frank (B.S.)  
Foote, Stanley S. (A.B.)  
Fraser, Frances Maxwell  
Freeman, Harold Austin  
Freeman, Helen L.  
Freese, Theron  
Freitag, Lena  
Friend, Gertrude  
Friend, Robert Sherman  
Funderberg, Isaac V.  
Furber, Marion Ruth  
Gaines, Paul  
Galliger, Elizabeth  
Gardiner, Dorothy (A.B.)  
Gardner, Eleanor  
Gaud, Margaret  
Gentner, John  
George, C. D.  
Gibborn, Julia Helen  
Gilbert, Mabel Alice  
Gill, Alice B. (A.B.)  
Glantz, Geneva  
Gleiss, Irene E.  
Godshall, Leon D.  
Goldthwaite, Helen Lucy  
Goodenow, Francis G. (A.B.)  
Goodwin, Ralph Talbot  
Gormley, Harriett  
Grant, Garnet Berke (B.S.)  
Gray, Dr. Etta (M.D.)  
Gray, Gretta Vera  
Greene, Gertrude E.  
Greenwood, Barbara A.  
Green, Mrs. Vivian (A.B.)  
Griffin, Herschel R.  
Groover, Addie May  
Halbertson, O.  
Handy, Leva M. (M.A.)  
Hara, James Hosoki  
Harrison, Mazie Elizabeth  
Harvey, Fern Mildred (A.B.)  
Hatfield, Clara C. (A.B.)  
Hawkins, Clarice (A.B.)  
Hawkins, Jessie Meredith  
Haynes, Diantha M. (A.B.)  
Hearst, Nora H.  
Hedenburg, Ivy Melvina  
Herrick, Mary L. (A.B.)  
Hewitt, George Willis  
Hibbard, Elizabeth  
Hickman, Mary I.  
Hickson, Hazel (A.B.)  
Higgins, Elmer  
Hill, Anna Lavina  
Hill, Jack C.  
Hill, Stephenia E.  
Hills, Henry Merritt (A.B.)  
Hoagland, Bessie Mildred  
Hoenshell, Hattie  
Hollenbaugh, Jessie A.  
Hood, Blanche  
Horikoshi, Tokujiro  
Houk, G. D.  
Hoult, Agnes  
Hovey, Byron P.  
Howell, Helen McIver  
Humphrey, Gertrude L. (A.B.)  
Hurt, Bertha M.  
Hutchinson, Mrs. Emma R.  
Ingeroll, C. Maude

- |                              |                               |
|------------------------------|-------------------------------|
| Iwanga, Kiichi Karl          | McCarthy, Kate M.             |
| Jamgochian, Aroxie           | McCausland, Madame J.         |
| Jenkins, Alfred K. (Ph.B.)   | McDonald, George J. (A.B.)    |
| Johnson, Alice Myrtle        | McDougall, Tena               |
| Johnson, Edward E. (B.S.)    | McDowell, Hazel A. (A.B.)     |
| Johnston, Wendella Valeria   | McEuen, Virgil Lester         |
| Jones, Clara Ellen           | McFie, William Thomas         |
| Jones, Elizabeth A.          | McIntyre, Carlyle Ferren      |
| Kawamoto, Masasuke           | McKay, Isabella J. (A.B.)     |
| Kazarian, H. Abraham         | McKay, Mildred Janet          |
| Kells, Blanche               | McLaughlin, Marion Elsie      |
| Kelly, Julia Mae             | Macdonald, Norman L.          |
| Keppie, Elizabeth Evangeline | Mack, Beatrice Jenison (A.B.) |
| Kern, Helen                  | Mackey, Mrs. Maryette (A.B.)  |
| Kersey, Cleon                | Madden, George Hampton        |
| Kersey, Vierling             | Marks, Inez May               |
| King, Ruby Mildred           | Martie, Menga Anna            |
| Kirby, Charlotte             | Marvin, Cloyd H.              |
| Klingberg, Elizabeth Wysor   | Mason, Bessie H.              |
| Knecht, Irma A.              | Mattoon, Everett (A.B.)       |
| Kohlstedt, Ruth Wilhelmina   | Mealey, Roy Everett (A.B.)    |
| Krouss, William Alfred       | Means, J. Worthington (A.B.)  |
| Kuelling, Mary Louise        | Mentzer, Marion A. (A.B.)     |
| Kuhnle, Helene Louise        | Metcalfe, Tom                 |
| Lane, Edith L.               | Middleton, J. S.              |
| Lee, Ettie                   | Miguel, Mignonette Georgette  |
| Leñvig, Bessie C.            | Miller, Marjorie              |
| Lickley, Ernest Jameson      | Min, Chan H.                  |
| Lindenbaum, Morris           | Mitchell, Helen Augusta       |
| Lindsey, Hazel M.            | Miyata, Seinoshin             |
| Linn, Mary Seaman            | Monroe, Daisy Lee (B.L.)      |
| Livengood, Frances M. (A.B.) | Moore, Celeste Nettleton      |
| Livingston, Milton Whorten   | Moore, Edward J. (A.B.)       |
| Locke, Ruth M.               | Morrison, Alice Rebecca       |
| Loly, Kathleen D. (A.B.)     | Morse, Arthur Benton          |
| Long, Elsie M.               | Morten, Elizabeth             |
| Lopizich, Ivo John           | Mowry, Guy Leroy (A.B.)       |
| Loughran, Ruby Shelton       | Myler, Mrs. Bertha P. (B.L.)  |
| Lund, Le Valley              | Nance, Helen Morris           |

- Nash, Mary Vera (M.A.)  
Nattkemper, L. G. (A.B.)  
Neahr, Marie F.  
Nelson, James L.  
Netz, Joseph  
Nichols, Lloyd P. (A.B.)  
Nogle, Alta Grace  
Nutter, Marjorie A. (A.B.)  
Olson, Emery E.  
Orcutt, Eunice Marguerite  
Osborne, Clara Mae  
Padgham, Henry I. (B.S.)  
Palmer, Mrs. Ella Hadley  
Palmquist, Christina Marie  
Patton, Stanley Flickinger  
Peet, Alnora Louise  
Pentland, Gertrude  
Perkins, Amy (A.B.)  
Perry, Sue Hammill (A.B.)  
Pesqueira, Louisa  
Peters, Claude Everett  
Pierce, Charles Edward  
Pierce, Juliet Rich (A.B.)  
Pinnell, Homer F. (A.B.)  
Place, Richard George  
Platt, Helen Virginia  
Poindexter, Romaine LeM.  
Porter, Roy  
Powers, J. J.  
Preston, Ethelyn Lucina  
Prickett, Sarah  
Prince, Paul  
Pritchard, Sallie B.  
Provost, S. Margaret  
Ramsey, Walter M.  
Rapp, Wendell  
Rapp, Coral  
Rathwell, Raymond  
Read, Wendell P. (A.B.)  
Reams, Edward (A.B.)  
Reaves, Bessie F. (A.B.)  
Redden, Albert (A.B.)  
Redman, A. R. (B.S.)  
Redwine, Coral Florence  
Reed, Freeman Albert  
Reinhard, Charles John  
Rennis, Roswell Miller  
Richards, Ethel Estelle  
Richards, Inez Naoma  
Richmond, Dean Bates  
Richter, Margaret Rose  
Riddell, Guernie  
Rittenow, Floyd (B.S.)  
Ritter, Harry R. (A.B.)  
Robb, Edrena  
Rogers, Sherman  
Ross, Mary  
Ross, Mrs. Natalie M.  
Ross, W. H. T.  
Roswell, Miller  
Russell, Tom A.  
Ryan, Frank Joachim  
Sadicoﬀ, Minnie E.  
Saleen, Herman E. (A.B.)  
Samson, Wm. J. (A.M.)  
Schmitt, Katherine Cecil  
Schoneau, Wm. Henry, Jr.  
Schooling, Geo. F.  
Scroggs, Margaret McC.  
Seagrave, Ina E.  
Seaton, Thelma Elizabeth  
Seckler, Elsie (A.B.)  
Shaw, Mary  
Shultz, Myrtle  
Simmons, Ruby  
Simpson, Eddie  
Sinsabaugh, Anna Daisy  
Skinner, Edna Eugenia

Smith, Gerald Fredolin	Vance, Blanch L.
Smith, Isabel (A.B.)	Vaughan, Floy Rita
Smith, Mabel E.	Vaughan, Marion Melinda
Smith, Margaret Horrell	Veverka, M. Madeline
Smith, Munford	Viole, Pierre Paul
Snyder, Harriett (B.L.)	Vivian, Willian (B.L.)
Snyder, Helen D. (A.B.)	Wagner, Mrs. Nell
Snyder, Henry W. (A.B.)	Wagner, Mrs. Winona
Sokoloff, Lillian	Waldron, John Helm
Sowden, Harry	Walker, Ethel Vida (B.S.)
Spaeth, Walter Herbert	Walker, Richard Earl
Specht, Martha Helen	Wallace, James Edwin (B.S.)
Stark, Leander W.	Waters, Zura Orthello
Steele, Martha Lee (A.B.)	Watkins, Etta (A.B.)
Steffy, E. Pearl (A.B.)	Watson, Mrs. Minnie
Steinberg, Vera	Waugh, Lila E.
Stevens, June	Weaver, Cyrus Edquist
Stevenson, Mrs. Edith (A.B.)	Weaver, Grace Evangeline
Stevenson, Philo S. (A.B.)	Weir, Mabel Gertrude
Stiegletz, Marstella W.	Welch, Claude
Stillman, L. R.	Werner, Margaret Angeline
Stowell, Roy Sherman (A.M.)	Wescott, Virgil
Struthers, Mrs. Alice	White, Helen (B.S.)
Svensen, Lillian Mathilda	White, Ida Willena
Taber, Jessie	White, W. E.
Taylor, Ethel	Whittell, Florence E.
Theobald, Harry C. (A.B.)	Wiggs, Vera L.
Thomas, Walter W.	Wilde, Edith La France
Thomson, Cora Emma	Will, Arthur
Thomson, Williell (A.B.)	Wilson, N. R.
Thompson, Harry Douglas	Wilson, Theodora
Tilford, R.	Woodruff, J. A.
Torgerson, Ina B.	Wrottenberg, Jeanetta
Torrance, Evelyn Mary	Wyatt, Jane Dillon (A.B.)
Tritt, Jessie Amelia (A.B.)	Wyman, Gertrude B. (A.B.)
Tubbs, Julie	Yocum, Frank Willis (B.S.)
Tucker, Mary Ann (A.B.)	Zeiler, Joe
Tweedy, Mansfield	



**UNIVERSITY HIGH SCHOOL**

Adams, Clara Maude	Girdlestone, Alice Catherine
Adams, Florence Elizabeth	Golden, Lewis
Altman, Harry	Gray, Richard Leo
Ball, Robert Alfred	Greeley, Paul Orson
Ball, Louis Kenneth	Habbick, D. Hilton
Barnett, Helen Frances	Habbick, Frances Elizabeth
Beach, Aleene Florence	Haber, Philip
Beall, Richard	Haller, Walter Daniel
Benning, Margaret Stevens	Harding, Charles Elam
Blenkiron, Paul McKinley	Hayashi, Kakuji Kury
Brady, Florence Kendall	Herington, Helen
Brignall, Roy Ried	Howard, May Beatrice
Brignall, Delbert James	Isbell, Marjorie Sylvia
Bruce, Stanley	Jacobs, Boris
Burks, Jesse	Jacobs, Serge
Bushee, Gay Brayton	Jenkins, Carl Goodloe
Cederberg, Edith Margaret	Johnston, Wendella Valeria
Compton, Charles Ross	Kanne, Joseph Louis
Cook, Lawrence Bernet	Kendrick, Elmer
Cooney, Elzetta Marie	Kenny, Robert Walker
Core, Helena	Kinner, Maude Charlotte
Corning, Dorothy Royce	Kinsman, Julia Frances
Crowell, Willard Weymouth	Knoles, Lorraine Isabel
Darling, Dorothy Morrishroe	Loehr, John
DeKalb, Beatrice Walker	Long, Marian Loomis
DeKalb, Rosmond Bozart	McCollum, Clarence Harold
De Segrays, Phillipe	McDonald, Bert
Devereaux, Maud M.	MacCormack, William R.
Dickerson, Gertrude Luella	Macy, Charles D.
Dickerson, Lorene Maude	Martin, Gertruda Ruth
Dunton, Wallace A., Jr.	Meadows, Okey
Dwight, Charles	Mennell, Marion
Emerson, Jack L.	Metcalfe, Tom
Evans, Hugh B., Jr.	Miller, Daniel
Farber, William Polk	Miller, Harvey Augustine
Flick, Gertrude Lillian	Miller, Myron
Frankfurt, R. W.	Mills, Marguerite Lorese

Miners, Ernest A.  
 Mixer, John Eugene  
 Moore, Rutherford D.  
 Morris, Herbert I.  
 O'Haver, Ruth Elene  
 Olds, Reginald  
 Olsen, Bess  
 Otto, Erich Conrad  
 Owyang, Jane  
 Palmer, Luella Ruth  
 Peak, Marjorie Lee  
 Pesqueira, F. Alfonso  
 Peters, Claude Everett  
 Petitfils, Raymond Merritt  
 Rees, Mary Helen  
 Reeves, Claude Lamar  
 Reyes, William Lawrence  
 Richter, Charles Francis  
 Rogers, James Hunt  
 Ross, Hazel Dawn  
 Sanders, Verne Gray  
 Schoetl, August  
 Shields, Robert Dodson  
 Siegel, Seymour Joseph  
 Skinner, Chester Grey

Soper, Howard Lunt  
 Spangler, Avis Beryl Claire  
 Speicher, Elizabeth McM.  
 Stanton, Elna Celia  
 Stockton, William Henry  
 Sun, Grace  
 Tanenbaum, Ned  
 Tanzola, Tessie  
 Terry, Paul Dwight  
 Theall, Geneva Lucinda  
 Thomas, Abigail Veronica  
 Thomas, Bertha La Vern  
 Thorne, Dorothy Bogardus  
 Walls, Marjorie Dean  
 Weathers, Clarence Albert  
 Webster, Bernice Geraldine  
 Webster, Jean Marie  
 Weller, Katherine  
 Werner, Claes Edwin  
 Wilson, Ernestine Fenn  
 Wilson, Mary Esther  
 Wilson, Venus Eleanora  
 Wood, Willard Wane  
 Young, Charles  
 Zeller, Melba

## COLLEGE OF PHYSICIANS AND SURGEONS

### Freshmen

Bagalawis, T. I.  
 Bailey, Charles Albert  
 Beckett, Wilbur Archer  
 Berman, Phoebus  
 Bertie, William James (B.S.)  
 Bowers, William Sidney  
 Brown, J. Holmes  
 Chapman, James Lowell  
 Conaty, Joseph Aloysium, Jr.

Craig, Stephen A. (A.B.)  
 Damron, Milton Herbert  
 Dupree, Frederick F. (B.S.)  
 Farrell, Joseph Webster  
 Forster, Neslen K. (A.B.)  
 Friend, Robert Sherman  
 Godshall, Leon Leane  
 Herzikopf, Sam Sidney  
 Hobbs, Allen Thurman

Hohanshelt, Anna S. (A.B.)	Spencer, Reuel Madison
Jenkins, Rayel B. (A.B.)	Stark, Leander William
Johnson, Elmer H. (B.S.)	Steele, Mark Twain
Kaplan, Max	Sutton, Irwin Coleman, Jr.,
Kintzi, Erwin Julius	Torgerson, Ina Sophia
Larson, John A. (A.M.)	Van Fleet, Harry Darwin
Leven, Aaron Samuel	Viko, Louis Eindred
Lopizich, Ivõ John	Viole, Pierre Paul
Nider, Gerald Knowlton	Walker, Richard Earl
Otto, Lucie Ernestine	Watkins, John Frank
Saunders, Cecil Allen	Wescott, Virgil
Savage, Emerson Clark	Wilson, Theodore Roland
Schwarke, Katherine	Wing, Harold Stanley
Smith, Gerald Fredoline	Zeiler, Joe
Smith, Munford	

**Sophomores**

Annon, Walter Thomas	Leonard, A. T., Jr. (A.B., B.S.)
Baron, Peter Paul	Murphy, William Roe (B.S.)
Biorkman, Claes Gustav A.	Ryan, Clark David
Chapin, Charles Cox (B.L.)	Schwartz, Edward Isador
Cochran, Richard Cocks	Shea, George Clement
Daly, Edward Joseph, Jr.	Smith, Arthur Wells (A.M.)
Felsenthal, Louis (D.D.S.)	Swantek, Casemyra
Germon, Pierre Joseph	Talbott, William Thompson
Grant, Garnet Berke (B.S.)	Thompson, Harry Douglas
Hill, Jack Charles	Tice, Eldon Webb (A.B.)
Kessler, Ernest E. (A.B.)	Waters, Zura Orthello
Larson, Edwin	

**Juniors**

Anderson, James Fleming	Conway, M. W. (A.B., Ph.G.)
Andrews, Nina Wilhelmina	Coodley, Oscar
Beggs, James Henry	Cox, Edward Rochford
Breslin, Frank J. (B.L.)	Cunnane, Thomas B.
Brown, Charles W.	Fehrensens, Gail
Carson, William George	Fosdick, Mildred E. (A.M.)

Frank, Frances Pearl	McNealy, Mrs. Frances E.
Guidinger, William Emaniel	Norton, Archie Angus
Higginbotham, Gordon W.	Paulson, Archie Martin
Hoffman, Philip Block	Pierce, Sterling Newton
Hubbard, Henry DeWitt	Ramsay, Robert Ewart
Hutchinson, William Wilson	Renfrew, John Beatty
Judge, William Donald	Robinson, Charles A. (A.B.)
Judy, Arthur Sinclair	Rogers, Sherman
Kaufman, Morris Philip	Ruth, Roy F.
Levin, Harry	Rynin, Simon Solomons
Lupton, Earl Lane	Schenck, George F.
Marsden, Samuel Arthur	Shea, John Russell
Mellman, Clarence	Suski, Peter M.
Moody, Earl Egbert (A.B.)	Swancott, John
Morrison, Maude Leontine	Swartz, Bret Albert
McCoy, Earl Tucker	Taylor, Frank William H.
McClurkin, Arthur Archibald	Wallace, Guy (A.B.)
McDonald, Thomas Gregory	Well, Mrs. Maria C.
McLaughlin, James Henry	Wilson, Clair

**Seniors**

Benson, Carl Bennett	Lund, Le Val
Chung, Margaret Jessie	Mitchell, Harry Bolton
Cleeves, Montague	Monteleone, Joseph (A.B.)
Coleman, Stuart Napoleon	Moore, James Russell
Davis, Harry Herman	Nielsen, Harold Westring
Dorn, Norman Francis	Rood, Vernon Voorhees
Felch, Harry Justin	Saverien, Arnold Egard
Feldman, Abraham (A.B.)	Saylin, Joseph
Gummess, Karl Chester	Schaefer, John Hugo
Harris, Gilbert Franklin	Scholl, Agnes Julia
Jacobson, Harry Pincus	Schwartz, Joseph Leon
Josephs, Louis	Smith, James Kent

**Special**

Cooke, Harry Theodore (Special Senior)	Slanker, John Edwin (Special Sophomore)
Farmer, Leora	Whitlow, Leslie Willis
Fox, George Francis, Jr.,	

**Post-Graduate**

Caven, Evangeline (M.D.)

Kuroiwa, D. (M.D.)

Foxton, E. (M.D.)

Maronde, J. A. (M.D.)

Karaki, Y. (M.D.)

**THE COLLEGE OF LAW****Freshmen**

Abbott, James Melville

Benjamin, Pascal Paul

Abrams, William

Beckett, Francis Haynes

Ahlborn, John Frederick

Berman, Morris

Akahoshi, Ichiji M.

Berry, Fred McCune

Alber, Arthur

Betz, Cecil Pearl

Alexander, Maurice Alvin

Biedebach, William Fred

Alimisis, Liberius Eustathius

Bird, Richard Franklin

Allen, J. A.

Blakiston, John Houston

Alter, Richard

Black, Ralph Waldo

Ames, Edwin Neal

Bonelli, William George

Amidon, Beulah Elizabeth

Blalock, Eugene Uel

Anderson, Lorenzo Carleton

Blaney, Oliver Carlton

Arblaster, George Jeremiah

Bonn, Walter H.

Asadoorian, Kevork

Bowen, Vallance Herbert

Avery, Clark Milton

Boynton, Harold Law

Azumik, Teikichi

Bradley, Floyd Edison

Babb, Henry Raymond

Bradley, Thomas Henry, Jr.

Bailey, John Sherman

Brauer, Casimer J.

Baker, Girard Fred

Bravender, Eugene Allin

Baltimore, George

Brett, Arthur Thornberry

Baltimore, Isidor

Bright, Miller Artemus

Bank, Elliot Mantell

Briney, Perry Glenn

Banta, Earl Lott

Brown, Richard Baxter

Barkelaw, Elwood Henry

Brown, William Glenn

Barnett, Blaine

Bulfinch, Mildred Gray

Barton, George Sydney

Burns, Phil

Bayley, Edgar A.

Burr, Clifford F.

Becker, Ernest August, Jr.

Burton, Harold Nathaniel

Beecher, John

Cain, Charles Henry



Camp, Edwin Lee	Ellis, J. Pratt
Campbell, James Watson	Ellison, Harry B.
Carroll, Emmell Arthur	Enenkel, William Alexander
Castle, Chandos Barrett	Epstein, Henry Arthur
Chambers, Horace N.	Epstein, Harry
Cheever, Sumner Charles	Erickson, Gertrude Louise
Chelgrene, Ida Delia Adele	Esmilla, Sergis Zulaybar
Chiatovich, Cecil Lester	Evans, Edward Manfred
Chrisope, George Lloyd	Everts, Fred
Clark, Carl Crittenden	Farley, Floyd Wesley
Clayman, David Muriel	Fel, Édgar T.
Clock, John G.	Felt, Harold Edward
Coffman, Loyd Hamilton	Fenimore, George W.
Cohen, Alex	Finnen, Frank Henry
Comegys, Leonard Marin	Fisher, Eugene Irving
Conway, Paul F. A.	Fitzgerald, Ariel Oyola
Cook, Clarence C.	FitzPatrick, Richard
Converse, Flora Belle	Foladare, Frank
Copland, Elsie Mab	Forbes, William Boomer
Crop, William	Fowler, Lester John
Cruse, Frank David	Fowler, Walter Edward
Darling, Ralph	Fox, John G.
Dalin, Franz E.	Frampton, Jesse Jones
Davenport, Allen George	Freund, Leo
Davis, Claude Everett	Gage, B. Marie
Davis, Ralph Charles	Gibson, Huron Young
DeCoudres, Thomas Greene	Gilligan, John Andrew
Delamer, Gerald Fitz Herbert	Giroux, Louis Daniel
Dellamore, William	Glickman, David
Denny, Charles Elmer	Glueck, Nathan H.
Devereaux, Ward Henry	Gore, Jacob Charles
Difani, Leonard Joseph	Griffin, Merle Dewey
Dodson, James Hillsey, Jr.	Hafner, William Thomas
Doheny, Edward L., Jr.	Hamilton, Joe Dimon
Doig, Leroy Lowry	Hardy, Oliver Carlos
Drain, Lulu M.	Harriman, Gray Chenowith
Dunlap, Raymond Burr	Haun, Raymond Valentine
Dunn, Clarence J.	Hawley, Ray Lee
Duque, Gabriel Carlos	Heidt, Lee Thomas, Jr.

- Heffron, William Isaac  
Henneberry, Edward Joseph  
Herrick, George Ira  
Hertel, Elmer Joseph  
Hiemenz, Bernard  
Higgins, Harvey Garver  
Hillman, Richard Hansen  
Hookstratten, St. Cyr Eddie  
Homan, George W.  
Home, John Douglas  
Horowitz, Samuel  
Hoskins, Joseph  
Hurlburt, Leeland Milford  
Hurley, Jere E.  
Irving, Louis John  
Isensee, Thirza J.  
Isono, Taichi  
Ivins, Otto Hughes  
Jacobs, Otto Arthur  
Johnson, Kendrick  
Johnson, Todd Wellington  
Jones, Albert Franklin  
Jones, Lloyd Francis  
Jorday, Wayne Early  
Jouromsky, Mrs. F. E.  
Kaiser, Roy C.  
Kelley, H. B.  
Kendrick, Victor Hargrave  
Kennicott, Kenneth Boyden  
Kenyon, George Henry  
Kidder, Ralph Greely  
Kiggens, Harold Stanford  
Kinosita, James Otoichi  
King, John Stanley  
Kiyowara, G. D.  
Kloess, Roland A.  
Knight, Kathrine Howard  
Koll, Harvey William  
Krissinger, William Philip  
Landry, William Eli  
Lane, Lewis Palmer  
Larson, Walter Alexander  
Larson, Wendell Everett  
Leahy, Harry Joseph  
Lawler, Norman  
Lopez, Albert Ross  
Love, Esther Irene  
Lukens, Charles Edward, Jr.  
Luth, Fred  
Lynch, Edwin Parker  
Machin, Charles Spencer  
MacMillan, Clifford James  
Maguire, Patrick John  
Lane, Lekis Palmer  
Makaleoshi, I.  
Malette, Frank Liven  
Manion, Francis LeRoy  
Marcher, Ralph Hiram  
Marchetti, Joseph Carl  
Marks, Samuel  
Marks, Theodore William  
Marsh, Llewellyn Fay  
Marxen, Edward Henry  
Mather, Howard Artemus  
Matlock, Laurence Vernon  
McBride, James Ackley  
McClean, Harry Justus  
McCollum, Alvin Sanborn  
McCauley, Fred E.  
McCreery, Maurice Elliott  
McEuen, Virgil  
McGee, Donovan  
McKinnon, Morton Howard  
McIntosh, Frazier  
McLemore, J. E.  
McNair, Jerome Willis  
McNamee, Luke John  
Melvin, Bradford Morse

Meyer, Syllas Slocum	Pike, Bennette
Meyers, Fred Olin	Polkinghorn, John Walter
Miller, Edwin Woods	Porter, Jesse Bach
Miller, George Lee	Potter, Newton E.
Miller, Harvey Augustine	Purpus, Edward Charles
Mills, Frederick S. K.	Quimby, Elbert Whitney
Mitchell, Allen George	Redwine, Donald Macnale
Mitchell, J. H.	Reeder, Leland Parker
Mitchell, Walter Kelley	Richmond, Hedley
Moody, Ulysses Clifton	Ridout, William Weeks
Mooney, James Junius	Rieber, Benjamin H.
Moore, Clifford G.	Rifkind, Joseph J.
Morazumi, Tsuto	Ring, William Charles, Jr.
Morrill, Clyde Herbert	Robertson, Maud
Morton, McK.	Roche, Leonard James
Mukaeda, Katsuma	Rogers, Belle Green
Multhauf, Luie G.	Romandy, D. H.
Murray, Frank Forest	Ronan, Hanorah Kathryn
Musso, Edward Joseph	Ross, George Byron
Nahas, Abe	Rudolph, William
Neeley, Roy Davis	Russell, Jessie Anna
Negley, John Armand	Schaefer, Henry
Nelson, Flora Belle	Schaetzle, Arnold Frank
Newland, Clinton Campbell	Scharnikow, Charles Henry
Nickle, Samuel Clarence	Schlaegel, Clyde Elden
Nielsen, Hans LaVintz	Schmidt, Justus John
Nimmo, David	Schmitz, Earl Donald
Nix, George William	Shaw, Henry W.
Nix, Lloyd Stephens	Shaw, William Edward
Olson, Robert Marcellus	Sheldon, Caryl Mason
Orfila, Ernest Roland	Shepard, Arthur Cyrus
Parker, Russell Eduard	Silverberg, Milton Henry
Pedersen, Harold H.	Simpson, Ed
Pelzer, Isidor Archie	Sindorf, Ralph Theodore
Penniwell, Roy James	Sipe, Charles Albert
Perluss, Abe	Slavin, Matthew, Jr.
Peters, Claude Everett	Smith, Charles Austin
Petterson, Arvide Stephen	Smith, Dorothy Frances
Phister, Joy Montgomery	Smith, Edmund Lloyd

Smith, F. Marion	Thomas, Marvin
Smith, George Grove r	Thomas, William L.
Smith, Hugh Bryan	Thompson, John Harry .
Smith, James Turner Roper	Thompson, Paul Dean
Sorenson, Walter	Thompson, Peter Joseph
Southwick, Harold Irving	Thorne, Lester Cornelius
Spieß, Louis Charles, Jr.	Tomlinson, P. D.
Stagg, Ira James	Topham, John Weston
Stahl, Robert John	Trask, Walter Folsom
Starr, Jay Garland	Tupman, Will Hamer
Stearns, Francis Ardell	Turney, Raymond Irving
Steintorf, Paul Bower	Vaughan, Dale German
Stevens, C. R.	Veale, Anita Wilson
Stevens, Clarence	Veloso, Juan Avila
Stevenson, F. Josephine	Vilas, Ralph A.
Stewart, Oliver Paron	Voss, Louis Alfred
Story, Archie Edward	Wallace, Charles Daniel
Stuart, Edward Ashleigh	Ward, Clarence Clifford
Sturzenacker, Carl Burnley	Ware, John Allen
Sullivan, Thomas Talbot	Waters, Frank Joseph
Tanquary, Grafton P.	Weaver, Wiley Monroe, Jr.
Taylor, Harry Roland, Jr.	Webber, Joseph Benjamin
Teel, Courtney Augustus	Weik, Frederick
Thiele, William Gustave	Whittemore, Rex Avery

### Juniors

Africa, Bernabe	Bock, Mae C.
Ambrose, Thomas Lyford	Booth, Claude Edwin
Anderson, William Vance	Botsford, John William
Andrews, Claud B.	Bowron, Fletcher
Arnold, Max Barton	Bradshaw, Norman H.
Banta, George	Breslin, George Montgomery
Beach, Earl C.	Brett, Irl D.
Beatson, Kenneth Carlisle	Brinck, Grace Bertha
Beirne, William Bryan	Brown, Ralph James
Blair, George DeLany	Burton, John F.
Blake, Samuel R.	Butrick, Llewellyn V.
Blanche, Eugene H.	Cameron, Don R.

Cannan, Arnold Martin  
Canvel, David  
Carey, Kenneth Anton  
Clark, Earl W.  
Clark, John Gee  
Clement, Hall Fernando  
Costello, James Patrick  
Crane, Harley  
Crawford, Henry Paine  
Crawford, Leroy W.  
Creighton, Neal  
Crenshaw, M. McCargar  
Curtiss, Ralph Gilson  
Delorey, Edward H.  
Dickey, Lindsay K.  
Doran, Mollie Louise  
Dorr, Donald G.  
Doyle, Clyde Gilman  
Dunn, John Carridon  
Durant, Harlan Edward  
Eaton, Allan March  
Eberhard, Claire Vivian  
Edwards, Noel Condiff  
Enter, Frank Ambrose  
Eshelman, Joseph Franklin  
Eveland, Thomas Lyle  
Faucett, Carl Webb  
Ferry, Hubert C.  
Fisher, Harold E.  
Follette, Channing  
Gail, Sherman  
Gallaher, Al J.  
Gardiner, Everett S.  
Garroway, Samuel Milton  
Gerich, John Luke  
Hahn, Samuel S.  
Hanes, Simion Fred  
Hanlon, Thomas Patrick  
Hardesty, Robert F.

Haun, Fred Adoff  
Henshey, Howard Blair  
Herron, Mary Leo  
Hill, David A.  
Holloway, Clayton Edward  
Holman, William Steele  
Howe, Paul Taylor  
Howlett, Elmer Horace  
Humphries, Louis Kyle  
Hunt, Arthur Richard  
Hutchins, Alfred Tennyson  
Jacobs, Delmar Rogers  
Johnson, Earl Edwin  
Johnson, Lillian E.  
Jordan, Curtis Calhoun  
Kadletz, Frank Sherman  
Kaufman, Louis  
Kaufman, Sylvanus B.  
Keiser, Lloyd E.  
Kellogg, Caroline Rachael  
Kendall, Newton Jerome  
Ketcherside, Hugh V.  
Kimmel, S. P.  
Koenig, Victor Hubert  
Kimura, Zenzun  
Lehnhardt, Paul, Jr.  
Lenox, Edwin O.  
Lewis, Benjamin  
Lilley, Vernon W.  
Linneman, Hisko Meyer  
Little, Walter James  
Mahan, Henry W., Jr.  
Mann, Ernest  
Mason, Bruce W.  
Matsumoto, Torihiko  
McBryde, James Fambrough  
McCarey, Thomas Leo  
McCully, Earl Justin  
McIver, Paul George



McNary, Hugh Alin	Sheldon, Albert Leverett
McPike, George Vardeman	Sheppard, Ben Thomas
Miyasaki, Shoji	Sigler, Paul Eldred
Modesti, Phinoclade	Silverstone, Myron Wilk
Morton, W. Taylor	Silverstone, Seymour
Mullins, Fla Graves	Smith, Frank MacPherson
Nye, Clement DeWitt	Smith, Fred
Olson, Emil A.	Smith, Mary Stanwood
Osborne, Henry Zenas, Jr.	Snyder, Beatrice Carolyn
Owens, Timon Evans	Stanton, Adrian Cornell
Pawson, James Edward	Sterry, Philip Clinton
Peckham, Everett Robin	Stephens, Robert Grainger
Peipers, Paul	Stoddard, Frank Wilcox
Perry, Howard M.	Stone, LeRoy Russell
Perry, John Laird	Subith, Fred E.
Pinney, Warren Ben	Tarr, Carl Vernon
Platz, Hugo	Thomas, Clyde
Pope, James Harlam	Thompson, Sewell William
Porter, Bruce William	Tipton, Syril Sutton
Remalia, Von R.	Todd, Newton M.
Rilliet, Charles Eugene	Tomlinson, Herbert Morgan
Rittenhouse, Charles Joseph	Tompkins, Walter Lowery
Rives, Howard	Van Why, Newton
Roberson, Edwin Conway	Vincent, Richard Lionel Bob
Robbins, Joe H.	Walker, Stanley Boyd
Rodden, Edward Jerome	Walsh, Edward Earl
Rosenblum, Joe	Walsh, H. E.
Rucker, Lyle Wilson	Werner, Erwin Peter
Runkle, Clarence B.	Wheat, Watson Selden
Sadicoff, Harry Gregory	Wilder, Edward
Sawyer, Elmer Ellsworth	Willis, Fred Albert
Sigler, Elmer Gay	Wilson, Joseph A.
Sellberg, Harold Theodore	Woodward, Marcus A.

**Seniors**

Allen, Lawrence Winfield	Beckwith, Ruth Edna
Angus, Howard W.	Bell, Oliver William
Arakelian, Astor M.	Bergh, Chauncy A.
Basa, Carlos	Brannick, Lawrence

Brown, Joseph Edgar  
 Brown, Lewis Harris  
 Browne, Samuel Harrison  
 Brunner, Fred  
 Carter, Samuel Oliver  
 Castellaw, Homer Jordan  
 Chelgrene, Marie  
 Cobb, Lawrence C.  
 Cohen, Benjamin Charles  
 Collard, William John  
 Collins, Victor Ford  
 Conrad, Elson G.  
 Costello, Evelyn J.  
 Coultas, Birdie Barnard  
 Counts, Carroll Milford  
 Crandall, William M.  
 Creutz, Gregory M.  
 Danforth, Florence Virginia  
 Daze, Leo David  
 Doolittle, Gordon Rodgers  
 Elmore, John, Jr.  
 Emme, Otto Joseph  
 Ferrahian, Matthew G.  
 Ferris, James Charles  
 Fisher, Wayne Holmes  
 Fitts, Buron Rogers  
 Frankel, Josephine Phillips  
 Frincke, Martin Carl William  
 Fuller, Charles Chapman  
 Gibbs, L. Vernon  
 Glass, Richard Charles  
 Grady, John W.  
 Gray, Lester Marion  
 Grether, Myra Dell  
 Griffin, Charles John  
 Haskins, John Earl  
 Haslett, Elmer Resides  
 Haynes, John Crepin  
 Hirsh, Harry

Horowitz, Fred  
 Jones, William Luke  
 Keith, Donald McKee  
 Kessler, Albert  
 Klein, Emilie Sophia  
 Laidlaw, William Rae  
 Lester, Will I.  
 Loenholm, Ragnwald H.  
 Loewenthal, Paul  
 Malette, George Ansel  
 Mansur, Fred  
 Marten, Wesley E.  
 Mattoon, Everett Warren  
 Miller, Samuel A.  
 Morrison, Edward H.  
 Morrow, Ray Leslie  
 Morton, Harold C.  
 Nelson, Charles Raymond  
 Nethaway, Dean Braddock  
 Newell, Kenneth Cuthbert  
 Packard, John C.  
 Partridge, Edwin Ellis  
 Pearson, Frederick Harold  
 Randall, Wilbur Woodruff  
 Randolph, Percilla Lawyer  
 Robinson, John C., Jr.  
 Rodriguez, Arsenio Ernesto  
 Ross, Ernest S.  
 Roth, Lester William  
 Rouse, Albert Frank  
 Saunders, M. Curtis  
 Schell, Walter Otto  
 Schoenau, William Henry, Jr.  
 Searle, Edwin Lorraine  
 Shafer, Leroy Vincent  
 Shepherd, Howard Franklin  
 Shepherd, John Simeon  
 Sherer, Arthur Clarence  
 Smith, Harry Kellar

Smith, Robert Fulton  
Spinks, John Webb  
Stevenson, Walter Roland  
Sword, James Owen  
Thompson, Mark  
Trott, Charles Cecil  
Tuttle, George Wilson  
Upton, Fort Jewett  
Versteeg, Chester J.  
Watkins, Fred Arthur

Webb, William Philip  
Wells, Ida Viola  
Willebrandt, Mabel Walker  
Willis, Wade  
Woodhead, Florence Miriam  
Woods, Donovan Whitney  
Woodworth, Clyde Cyril  
Young, Lyndol Lester  
Zacher, Edwin Frederick

### Post Graduates

Bullock, Georgia P.  
Iwamoto, Hideo  
McLaughlin, Robert D.

Oyuki, Mananosuke  
Shontz, Orfa Jean  
Tsukuda, Hisaslu

### Summer School

Abbott, James Melville  
Ahlborn, John Frederick  
Ambrose, Thomas Lyford  
Angus, Howard W.  
Arnold, Max Barton  
Barkelaw, Elwood Henry  
Barton, George Sydney  
Beecher, John  
Beirne, William Bryan  
Berry, Fred McCune  
Blachley, Miss L. E.  
Blake, Samuel R.  
Botsford, John William  
Bohlken, George F.  
Brannick, Lawrence  
Brown, Joseph Edgar  
Brown, Ralph James  
Browne, Samuel Harrison  
Burton, John F.  
Cameron, Don R.  
Canvel, David  
Carey, Kenneth Anton

Carter, Samuel Oliver  
Collard, William John  
Costello, James Patrick  
Crawford, Henry Paine  
Crenshaw, M. McCargar  
Davenport, Allen George  
Doran, Mollie Louise  
Doyle, Clyde Gilman  
Duncan, J.  
Eaton, Allan March  
Ellison, Harry B.  
Esmilla, Sergius Zulaybar  
Faries, D. R.  
Faucett, Carl Webb  
Ferris, James Charles  
Ferry, Hubert C.  
Fitts, Buron Rogers  
Fitzgerald, Ariel Vyola  
Follette, Channing  
Frincke, Martin Carl W.  
Glass, Richard Charles  
Gray, Lester Marion

Grether, Myra Dell	Perry, John Laird
Griffin, Charles John	Plannette, Mrs.
Haslett, Elmer Resides	Platz, Hugo
Heffron, William Isaac	Randolph, Percilla Lawyer
Hirsh, Harry	Robbins, Joe H.
Humphries, Louis Kyle	Ross, George Byron
Husar, Leonard G.	Ross, Ernest S.
Hutchins, Alfred Tennyson	Rouse, Frank
Jones, William Luke	Rucker, Lyle Wilson
Kadletz, Frank Sherman	Russell, Jessie Anna
Klein, Emilie Sophia	Saunders, M. Curtis
Koenig, Victor Hubert	Schaffer, John Godfrey
Lester, Will I.	Schell, Walter Otto
Lingle, Donald Harold, Jr.	Scully, C. H.
Little, Walter James	Shapiro, Aaron
Littleton, C. H. S., Jr.	Sheldon, Albert Leverett
Loenholm, Ragnwald H.	Shepherd, John Simeon
Loewenthal, Paul	Smith, Fred
Mansur, Fred	Smith, F. M.
McCarey, Thomas Leo	Spiess, Louis Charles, Jr.
McIver, Paul George	Taylor, R. Emmett
Modesti, Phinoclade	Thompson, Mark
Mooney, James Junius	Trott, Charles Cecil
Moore, Clifford G.	Tuttle, George Wilson
Morrison, Edward H.	Versteeg, Chester J.
Morton, Harold C.	Wells, Ida Viola
Mullins, Fla Graves	Wilder, Edward
Nethaway, Dean Braddock	Willebrandt, Mabel Walker
Newell, Kenneth Cuthbert	Williamson, William Roy
Olson, Emil A.	Willis, Wade
Owens, Timon Evans	Wilson, Joseph A.
Peipers, Paul	Zacher, Edwin Frederick
Perry, Howard M.	

## THE COLLEGE OF DENTISTRY

### Freshmen

Adair, H. S.	Arnott, M.
Alvarez, H. H.	Bach, R. A.
Andrews, J. V.	Bagwill, L. E.

- Ballinger, S.  
Barnhart, H. M.  
Barnett, K. G.  
Baughman, L. M.  
Beebe, C. M.  
Berryhill, G. D.  
Blake, T. D.  
Bleak, S.  
Blythe, V. M.  
Brandriff, G. K.  
Brockett, D. R.  
Brown, G. E.  
Brown, H. I. Q.  
Canvel, E.  
Carson, J. W.  
Cobb, A. A.  
Disraeli, I.  
Dobson, O. C.  
Duey, H. P.  
Eader, L. W.  
Ehrenclou, E. R.  
Fallgren, P. A.  
Fletcher, J. W.  
Ford, H. A.  
Friedman, A.  
Garcia, G. F.  
Geha, W. J.  
Gonzalez, A. A.  
Hardstein, J.  
Haughawout, L. S.  
Hendricksen, E. H.  
Hendry, W. P.  
Hill, H. J.  
Holubeck, P. E.  
Hook, A.  
Ironmonger, J. L.  
Johnson, R. A.  
Jones, C. W.  
Kellogg, B. B.  
Krause, F. W.  
Leavitt, H. C.  
Levitin, A.  
Lichtenwalter, R. B.  
McElvaine, H. E.  
McIntyre, E.  
McMillan, R. D.  
Marshall, E. H.  
Mayer, C. H.  
Menges, J. B.  
Miller, K. J.  
Morje, S. H.  
Moseley, C. C.  
Murdock, L. H.  
Neves, R. C.  
Nicholson, N. M.  
Noel, P. M.  
Noji, Y.  
Packard, E. S.  
Perner, L. H.  
Peschong, J. H.  
Philip, W. B.  
Phillips, B. A.  
Pierce, C. R.  
Planck, M. G.  
Ramage, G. R.  
Roberts, R. R.  
Ross, B. E.  
Sanders, A. E.  
Schoonmaker, H.  
Shay, W. W.  
Smith, A. A.  
Smith, D. R.  
Smith, V. J.  
Somerville, V. J.  
Springer, P. J.  
Sweningsen, W. S.  
Thee, E. J.  
Thompson, M. J.



Tistaert, G. A.  
Travis, W. G.  
Trumpower, H. H.  
Tsukifuji, F. U.  
Vanasan, D. W.  
Vawter, M. B.  
Vieille, A. C.  
Vogt, G. O.  
Volin, L. W.  
Waltemeyer, B.

Walton, W. A.  
Warren, R. A.  
Washburn, J. H.  
Watanabe, B.  
Waters, J. E.  
Wheeler, W. W.  
White, G. W. E.  
Whitesell, D. W.  
Wondries, H. W.

### **Juniors**

Alexander, R. H.  
Armitstead, E.  
Arnold, H.  
Ballard, C.  
Beesemyer, N. L.  
Blurock, E. W.  
Bogart, J. C.  
Brown, C. H.  
Brownson, E. M.  
Buehren, W. J. C.  
Casebeer, C. R.  
Chatterton, V. W.  
Cole, C.  
Connelly, J. T.  
Cook, A. G.  
Covert, S.  
Critchlow, R. F.  
Davis, R. O.  
Eames, J. E.  
Elsperman, G. A.  
Epstein, E. C.  
Feldman, I.  
Fitzhugh, L. M.  
Foster, F.  
Gay, V. J.  
Gibbs, H. E.

Gonzalez, A. A.  
Gould, G.  
Greef, C.  
Gum, F. W.  
Hawke, E. J.  
Haycroft, M. S.  
Hill, J. F.  
Holcombe, H. V.  
Holcombe, P. T.  
Howard, J. M.  
Hutchason, L. B.  
Koshi, G.  
Kurata, T. H.  
Kurisaki, H. I.  
Lardner, W.  
Larson, R.  
Leavitt, J. G.  
McElwee, J. W.  
McIntyre, E.  
Miller, J. C.  
Mitchell, H. L.  
Montgomery, F. C.  
Moon, T. L.  
Nielson, L. P.  
Niisato, I.  
O'Brien, R. F.

Peterson, H. P.	Smith, W. E.
Purviance, S.	Snyder, J. W.
Reese, B. L.	Standefor, H. F.
Rush, D. D.	Stoker, J. O.
Saito, D.	Straub, H. L.
Scholz, E.	Wessel, E. H.
Schwamm, J. A.	Whipple, H. A.
Schwartz, A.	Williams, C. H.
Scott, N. H.	Young, R. F.
Scruggs, J.	

### Seniors

Abbott, W. G.	Lynn, R. W.
Baker, W. J.	Mizushima, N.
Brandel, R. M.	Nagao, C. K.
Carter, J. H.	Pace, R. J.
Conner, J. R.	Petty, F. F.
Cosgrove, J. E.	Ramsaur, E. E.
David, M. T.	Rasmussen, R.
Davis, E. V.	Richmond, H.
Farr, J. F.	Sadler, H.
Finley, H. R.	Sakamoto, D.
Fischer, M. M.	Samuels, M. G.
Guth, W. E.	Searcy, C. W.
Heller, L. A.	Spann, S. T.
Hill, T. L.	Stewart, R. R.
Humphreys, K.	Swenson, E. A.
Husted, R. P.	Syme, S. I.
Jackson, W.	Tevrizian, M. M.
Kent, A. J.	Thomas, G. A.
Koch, A. H.	Thornburg, E. G.
Larba-lestier, E. R. S.	Wells, I.
Lindsey, J. L.	Westerfield, J. K.
Lipking, F. H.	Young, H. L.

## THE COLLEGE OF THEOLOGY

### Junior Class

Burnight, Ralph F.	Leavitt, Frank N.
Bruner, Joseph W.	McIntire, Warren C.
Butters, Archibald D.	Moore, Edward J. (A.B.)
Grose, Madison F.	Nagata, Samuel (A.B.)
Halfman, Peter D.	Nagata, Samuel, A.B.
Haydock, Earl H. (A.B.)	Silke, V. Stanley
Hildebrand, Henry L.	Sydnor, Chas. E.
Kelsey, James C.	Vennink, Geo. A. (A.B.)
Kluth, Paul J.	

### Middle Class

Lucas, Lawrence V.	Torrance, Arthur (A.B.)
Lineweaver, Thos. M., (A.B.)	Weiss, Benjamin S.
Trotter, Fred B.	

### Senior Class

Benefiel, Geo. J. (A.B.)	Malan, William E. (A.B.)
Bolton, Arthur	McFarland, Harry B. (A.B.)
Butterfield, Oliver M. (A.B.)	Min, Chan H.
Lineweaver, Thos. M. (A.M.)	Shumway, Chas. W.

### Special

Barker, John P.	Nelson, Miles G.
Cummings, Irene	Shimizu, Fred N.
Dashiell, James R.	Traveller, Gilber B.
Davidson, Chas. B.	Tsukamoto, Geo. K.
Knight, Chas. L.	

## COLLEGE OF PHARMACY

### Juniors

Anderson, John Carl	Blair, Leland Chaffin
Ashcroft, John Reginald	Blakeley, Arthur
Ball, Robert A.	Bromfield, Herman P.

Brubaker, Theodore Mercer	Moore, Wallace W.
Carrick, Edna L.	Nakamura, Hirashi
Daniels, Harry Clinton	Peterman, Ernest Elgin
Doty, John Edward	Pfathler, Mary
Ezell, Fred William	Prettyman, Ross William
Gilhousen, Wendell	Ray, Harold M.
Gray, Norman Elsworth	Shimmin, Howard Spencer
Griffeath, Dale E.	Sims, Robert Paige
Haviland, Steven Andrew	Spaulding, Clair Donald
Heying, Fred W.	Sters, Walter Edwin
Hoisington, Ralph Sherman	Stone, Perry Bruce
Houk, George D.	Taeko, Jojima
Hubbard, Frank B.	Thomas, C. DeWitt
Ishizuka, K.	Thorman, Emma Lena
Iwanaga, Kiichi Karl	Waterhouse, R. G.
Jones, David J.	Wright, Joseph Hamilton
Leader, William Anthony	Yoshifuca, Tokinaka

**Seniors**

Ager, Zelba Martha	Huxtable, Milton Francis
Baker, Ben Byrd	Inuma, U. U.
Brown, Verna Harriett	Ingles, Clement Stanley
Byrne, M. Ernest	Mastin, Grant Herschel
Clinton, Francis Joseph	McCombs, John W.
Duncan, James Ekalveras	McFayden, Dwight Snyder
Edelman, George M.	McLeod, Norman James
Eichler, Bertha	Nolan, Edwin James
Ezell, Fred William	Prince, Edwin Eugene
Fernald, Clyde R.	Putnam, Freeland C.
Frankfurt, R. William	Scribner, William Arthur
Goold, Roy A.	Sharpe, James S.
Gratto, Earl B.	Smith, Meryl D.
Hamblen, Henry F.	Spalding, Clinton H.
Hankammer, Walter August	Stabler, Robert L.
Hartman, Rudolf Roldin	Tanaka, Roohei
Hause, Harold Albert	Weaver, Cyrus Edquist
Herrman, Arthur P.	Wills, Leslie LeMoyne
Heying, Edward S.	Yant, W. E.
Hilton, Bertha	

**THE COLLEGE OF ORATORY****Private**

Barnes, Mrs. Jessie B.	McAdow, Ida Belle
Barnhart, Agnes R.	McAndrews, Mary
Brown, Vesta E.	Maguire, Mrs. Lulu
Burns, Corinne May	Martie, Menga A.
Chan, Caroline	Mason, Mildred
Claggett, Fern Rose	Millar, Cheryl
Constant, Claribel	Miller, Grace E.
Creutz, Gregory B.	Mizener, Ruth Agnes
Crowther, Rhea	Olds, Margaret R.
Daniels, Mrs. Cora	Olson, Edward L.
Davies, Henrietta	O'Neil, Mary Phila
Devereaux, Maud M.	Patton, Clifton Y.
Dick, Margaret E.	Pickering, Sarajo I.
Dodson, Corrin	Pratt, Evelyn
Don Carlos, Mrs. Florence	Rominger, Mrs. J. A.
Edwards, Margaret L.	Roos, Lucile E.
Farley, Floyd W.	Rosin, Ethel E.
Firth, Mildred	Schaefer, Henry
Fleishman, Mrs. Gussie M.	Spaeth, Walter H.
Graves, Rachel E.	Starkweather, Stella
Gratton, Marjorie	Steck, Roland A.
Gurney, Barbara E.	Swain, Kathleen
Harper, Cora M.	Swanson, Mamie H.
Henrickson, Althea Lenora	Tolbert, Lucille
Hicks, Florence E.	Van Grove, Terese
Howard, Frances	Wadsworth, Gladys
Hubbard, Virginia	Waldeck, Alice
Hughes, Faye Edith	Wardwell, Alice
Jackson, Bernice	Webster, Jean M.
Jamgochian, Araxie	Welch, Esther
Kern, Helen	Wiebers, Hortense E.
Knecht, Lora Belle	Wimberley, Olive
Knecht, Marjorie	Wright, Mary M.
Lieberg, Helenita	



**Class**

Blalock, Ugene	Hughes, Clifford
Bloomfield, Lenora Gertrude	Hughes, Faye Edith
Bowen, <b>Mary</b>	Jackson, Bernice
Brewster, Harold	Jamgochian, Araxie
Brown, Vesta E.	Kallstedt, Frances
Bugbee, Helen F.	Kelsey, James
Burns, Corinne	Kim, Kwan-You
Calkins, Lorna	Knecht, Lora Belle
Candee, Lois	Knecht, Marjorie
Carpenter, Elizabeth	Knight, Charles
Clark, Willie	Lieberg, Helenita
Constant, Claribel	McAdow, Ida Belle
Crowther, Rhea	McCormick, Grace
Davies, Henrietta	McCrea, Alta M.
Dick, Margaret E.	McEuen, Isabel
Dodson, Corrin	McKinnon, Mrs. Ida
Don Carlos, Mrs. Florence	Magnuson, Edla
Dresden, Iowa	Maguire, Mrs. Lulu
Edwards, Margaret L.	Mahan, Jr., Henry W.
Firth, Mildred	Mason, Mildred
Fleishman, Mrs. Gussie	Millar, Cheryl
Frengh, Eugene	Miller, Grace E.
Fybush, Irma	Monteith, Mrs. Justine
Gratton, Marjorie	Murray, Elva
Graves, Rachael	Newman, Claire
Gray, Grette V.	Olds, Margaret R.
Grimes, Ethel B.	Olson, Edward L.
Grua, Clifford	Olson, Renel
Gurney, Barbara	O'Neil, Mary Phila
Hammond, Olga	Patton, Clifton Y.
Hargis, Helen	Poggi, Ruby
Heflinger, Lydia	Pratt, Evelyn
Henrickson, Althea L.	Raymond, Vanness
Hicks, Florence	Rosin, Ethel E.
Hinsdale, Willian	St. John, Loyd
Howard, Frances	Schmitz, Victorine
Hubbard, Virginia	Schraeder, Mary G.

Snowden, Mildred  
Snyder, Evelyn  
Spaulding, Irving  
Springer, Florence  
Steck, Roland A.  
Swain, Kathleen  
Tolbert, Lucille  
Tucker, Harold  
Wadsworth, Shirley  
Wahrenbrock, Erwin

Webster, Jean M.  
Weiss, Benjamin  
Welch, Esther  
Wendt, Harvey  
Wilkes, Mary  
Wimberley, Olive  
Woehr, Ida  
Wood, Frances  
Work, Gilford  
Wright, Mary W.

### THE COLLEGE OF MUSIC

Abraham, Leslie  
Adams, Ilene  
Adams, Ruth  
Ames, Ruth  
Armbust, Norma  
Atwater, Margaret  
Ayers, Lilian  
Aylor, Mrs.  
Baker, Floyd  
Baker, Vesta  
Bastian, Lucy  
Bastian, Stella  
Bastian, Winfield  
Beckett, Naomi  
Beall, Mrs.  
Beets, Teresa  
Benedict, Florence  
Benson, G.  
Bishop, Mrs. Grace  
Blount, Effie  
Bockenkroeger, Edith  
Boshard, Earl  
Boyd, Edna  
Boyd, Jessie  
Boyd, Mary Letty  
Bradforde, C. E.

Brice, Lena May  
Brier, Carey  
Brown, Hazel  
Brown, Mrs. Robert  
Bruce, Grace  
Cannon, Mildred  
Caruthers, Emil  
Chase, Alice  
Cleveland, Hazel  
Cluss, Ethel  
Colterjohn, Gilbert  
Conrey, Ethelwyn  
Corwin, Harriett  
Cosner, Leone  
Couch, Esther  
Craig, Lois  
Crain, Ernestine  
Culver, George  
Culver, Mabel  
Cunningham, Irene  
Dakin, Mrs.  
Damron, Mary  
Davis, Elizabeth  
Davis, Lillian  
Davis, Robert  
Davison, Eva

- |                      |                     |
|----------------------|---------------------|
| DeCook, Anna         | Hill, Gladys        |
| DeVinney, Gladys     | Houts, Pauline      |
| Dewey, Addie         | Humphreys, Helen    |
| Dick, Margaret       | Hunley, Annette     |
| Dyer, Lois           | Hunt, Henrietta     |
| Emmet, Floyd         | Irvine, Cecelia     |
| Eveland, Ruth        | Jackson, Sydney     |
| Falkenstein, Stanley | Jacobson, Mrs. Carl |
| Fanshier, Mrs.       | James, Dorris       |
| Finney, Evelyn       | Jennings, Caroline  |
| Flickwir, Mary       | Jessurum, Jeanette  |
| Frackelton, J.       | Jessurum, Johanna   |
| Fraiser, Archie      | Johnston, Lillis    |
| Franklin, Mae        | Kern, Faye          |
| Franklin, Mary       | Kern, Mrs. Polly    |
| Frahm, Mae           | King, Elmer         |
| Friend, Antonia      | Kittrell, Miss      |
| Friend, Estelle      | Kori, Mrs. Bertha   |
| Foster, Mrs. E.      | Kuhnle, Wesley      |
| Forsblad, Arthur     | Lachman, Dorothy    |
| Fowler, Blanche      | Laning, Emma        |
| Furber, Marion       | Ledward, Miss       |
| Gardner, Ethel       | Lee, Dorothy        |
| Garrison, Dorothy    | Leitzau, Emily      |
| Garrison, Lois       | Lennox, Catherine   |
| Gay, Edith           | Leslie, Eli         |
| Gertson, Miss        | Leslie, Mildred     |
| Gould, Rita          | Listman, May        |
| Grabill, Mrs. H. P.  | Livingston, Miss    |
| Green, Gilbert       | Lopez, Josephine    |
| Griswold, Claude     | Lopez, Toney        |
| Hader, Emily         | Lovell, Alta        |
| Hagar, Theodora      | Lovell, Jennie      |
| Hartfield, Lillie    | Lynn, Theta         |
| Hauck, Mrs. Marion   | Lyon, Gretchen      |
| Henry, Mildred       | Lum, Maryette       |
| Hersey, Gertrude     | Maguire, Mrs. Lulu  |
| Hickman, Lillie      | Martin, Bessie      |
| Hilend, Martha       | Mathes, Margaret    |

McCarty, Mrs. Frank	Ritter, Helen
McCroskey, Josephine	Rogers, Vera
McMahan, Stella	Rudolph, Majel
McQuinn, Guelph	Rush, Miss
Middleton, Mrs.	Sanger, Mildred
Mitchell, Catherine	Savage, Faye
Mizener, Decotah	Schoeller, Marjorie
Murphy, George	Seamens, Arlene
Murphy, Nora	Sedweek, Edna
Murray, Elva	Sesma, Frank
Nagel, Flora	Sheppard, Bessie
Nagel, Kenneth	Simmons, Isabelle
Nagel, Newman	Simpkins, Florence
Nickey, Jeanette	Skeele, Elizabeth
Oakley, Clemmence R.	Skeele, Katherine
Obarr, Merle	Smith, Lucy
Oestreich, Marion	Smith, Rachel
Olcovich, Mrs. E.	Snowden, Mildred
Ong, Maurine	Stanton, Elna
Otto, Frank	Stegner, Alma
Parker, Irma	Stephens, Melzena
Paschall, Louise	Steward, Katherine
Paul, Mrs. Roland	Stewart, Lucy
Pearce, Pauline	Stroud, Grace
Pellicciotti, Joe	Tanaka, Shio
Petermann, Albert	Teague, E. C.
Petermann, Donald	Tedrick, Charlyn
Petermann, Vivian	Terry, Aileen
Peterson, Marion	Terry, Herold
Peterson, Mildred	Thorpe, Helen
Phelps, Mrs. W. W.	Tinker, Minnie
Pierce, Maria	Utter, Marjorie
Price, Ellen	Wagner, Rose
Price, Mary	Waltz, Mrs. Lozie
Rea, Mrs.	Way, Ruth
Rebhen, Pearl	Weir, McQueen
Reed, Marie	Welch, Harriett
Reeks, Gladys	Wellman, Luna
Rhodes, Marie	Wents, Edna

Wernlund, Alice  
Wilkes, Mary  
Winder, Louise  
White, Dorothy  
White, Mrs. G. O.

Whitwell, Gladys  
Woodforde, Florence  
Wright, Corrine  
Young, Mrs. P. W.  
Zell, Mary

### THE COLLEGE OF FINE ARTS

Blackburn, Mary  
Britton, Anna E.  
Buckman, W. B.  
Campbell, Eal  
Carlson, L. W.  
Clapp, Bessie B.  
Clark, Marie  
Cohn, Leona  
Cornell, J. H.  
Dando, Mrs. A. B. C.  
Foster, Mrs. Hallie  
Fouchaux, Madeline  
Glantz, Birdie  
Graves, Marian  
Hammeraas, Mrs. Oscar  
Hammond, C. C.  
Hooker, Alta B.  
Hutchinson, Mrs.  
Jones, Mary  
Kazanjan, Karl C.  
Lambert, Stella  
Leaver, Marian

Linardos, George  
Linn, Edward  
Merriam, Margaret  
Morgan, Edith  
Orban, Vivian  
Parker, Mrs. Henrietta  
Patterson, Idabelle  
Provost, Mrs. Margaret  
Ramsey, Virginia  
Robinson, Mrs.  
Ross, W. C.  
Chan, Russell  
Scott, Carlotta  
Seeley, George  
Shackford, Mabel  
Spalding, Gail W.  
Sprague, Charlotte  
Taylor, Rhea  
Teel, Oscar R.  
Welles, Helan  
Wetherbee, Benjamin  
Wing, Mabel M.



# INDEX

- Abdominal Surgery, 251, 253.
- Admission Requirements:
  - Liberal Arts, 41;
  - Graduate Dept., 61;
  - Summer Session, 190;
  - High School, 358
  - Medicine, 205;
  - Law, 257;
  - Dentistry, 286;
  - Theology, 315;
  - Pharmacy, 327;
  - Oratory, 343;
  - Music, 348;
  - Fine Arts, 353.
- Admission to the Bar: 255.
- Advanced Standing:
  - Liberal Arts, 43;
  - Medicine, 209;
  - Law, 257;
  - Dentistry, 286;
  - Pharmacy, 327;
  - Fine Arts, 353.
- Agriculture: 69.
- Alumni: Liberal Arts, 14;
- Dentistry, 281.
- Anatomy:
  - Medicine, 219;
  - Dentistry, 297, 299, 300.
 See also under Zoology.
- Apologetics: 317.
- Architecture: Liberal Arts, 152;
- Fine Arts, 354.
- Art and Design: 70.
- Athletics: See "Physical Education."
- Attendance, Regulations concerning:
  - Liberal Arts, 58;
  - Medicine, 211;
  - Law, 260;
  - Dentistry, 289;
  - Pharmacy, 328;
  - High School, 363.
- Bachelor, Degrees of: See under "Degrees."
- Bacteriology:
  - Medicine, 231, 233;
  - Dentistry, 309.
 See also under Biology.
- Biblical Introductions, 317.
- Bible: See under Religious Education.
- Biology:
  - Liberal Arts, 71, 74;
  - High School, 364.
- Botany: Admission, 52;
- Liberal Arts, 76;
- Pharmacy, 330;
- High School, 364.
- Buildings and Equipment:
  - Liberal Arts, 169-178;
  - Medicine, 197-206;
  - Law, 255;
  - Dentistry, 281-285;
  - Pharmacy, 326;
  - Fine Arts, 352.
- Business Regulations:
  - See under "Fees and Expenses."
- Calendar: 6-7.
- Catalogue of Students, 1915-'16: 374.
- Ceramic Art: 295.
- Certificates: See under "Courses Leading to Degrees, Diplomas and Certificates," and "High School Teacher's Certificate."
- Chemical Engineering: 167.
- Chemistry: Admission, 52;
- Liberal Arts, 79;
- Medicine, 228;
- Dentistry, 302;
- Pharmacy, 331;
- High School, 341.
- Church History: 318.
- Civil Engineering: 154.
- Civil Government: (Admission) 51.
- Classification of Students, 57.
- Clinics: Medicine, 202;
- Dentistry, 280.
- Commercial Law: Admission, 53.
- Conference Visiting Committees: 14.
- Conditions: Liberal Arts, 58;
- Medicine, 211.
- Cost of Living: See under "Fees and Expenses."
- Course of Study in Medicine, Regulations Governing: 211.
- Courses Leading to Degrees, Diplomas, or Certificates:
  - Liberal Arts, 54, 65, 66, 152, 154, 163;
  - Medicine, 212-214;
  - Law, 258;
  - Dentistry, 287;
  - Theology, 315;
  - Pharmacy, 328;
  - Oratory, 344;
  - Music, 349;
  - Fine Arts, 354;
  - High School, 362.
- Crown and Bridge Work: 294.
- Debating: 178, 276.
- Degrees:
  - Bachelor of Arts, 55;
  - Bachelor of Arts in connection with Doctor of Medicine, 56, 214;

- Bachelor of Arts in connection with Juris Doctor, 56, 258;  
 Bachelor of Divinity, 315;  
 Bachelor of Fine Arts, 354;  
 Bachelor of Laws, 258;  
 Graduate in Pharmacy, 328;  
 Bachelor of Science, 56;  
 Doctor of Dental Surgery, 287;  
 Doctor of Medicine, 212;  
 Master of Arts, 63;  
 Master of Arts in connection with Doctor of Medicine, 65, 214;  
 Master of Laws, 258;  
 Juris Doctor, 258;  
 Pharmaceutical Chemist, 328.
- Dentistry, College of: 260-284.  
 Department of Instruction:  
   Liberal Arts, 69;  
   Medicine, 218;  
   Dentistry, 290;  
   Theology, 317;  
   Pharmacy, 328;  
   Oratory, 341;  
   Fine Arts, 354;  
   High School, 364.
- Dermatology: 242.  
 Dietetics: 233, 277.
- Diplomas: See under "Courses Leading to Degrees, Diplomas and Certificates."
- Directory: 8.
- Discipline: Medicine, 211;  
   Law, 260;  
   Dentistry, 287;  
   Pharmacy, 340.
- Doctor, Degrees of: See under "Degrees."
- Drawing: Admission, 53;  
   Liberal Arts, 84;  
   High School, 365;  
   See also under "Art and Design," and "College of Fine Arts."
- Economics: 85;  
   Admission, 53;  
   High School, 365.
- Education: 89.
- Electrical Engineering: 162.
- Electro-Therapeutics: 242.
- Embryology: 219, 222.
- El Rodeo: 182.
- Engineering, Courses in: 56, 139-154, 168.
- Engineering Courses, Elective in Liberal Arts: 92.
- English Bible: See Religious Education.
- English Language and Literature:  
   Admission, 44;  
   Liberal Arts, 93;  
   High School, 366.
- English Final Examinations: 100.
- Equipment: See under "Buildings and Equipment."
- Evening Session, College of Law: 265.
- Examinations:  
   Admission, 43;  
   Liberal Arts, 58;  
   Medical Admission, 206;  
   Medicine, 211;  
   Law, 261;  
   Dentistry, 289;  
   Pharmacy, 328;  
   See also under "Calendar" and "Special Examinations."
- Extraction and Anaesthetics: 310.
- Faculties, The: 17-40.
- Fees and Expenses:  
   Liberal Arts, 182;  
   Summer Session, 190;  
   Medicine, 214;  
   Law, 277;  
   Dentistry, 311;  
   Theology, 324;  
   Pharmacy, 338;  
   Oratory, 345;  
   Music, 351;  
   Fine Arts, 357;  
   High School, 364.
- Fine Arts, College of: 352.
- Fraternities: 181, 276.
- French: 101;  
   Admission, 50.
- General College Requirements for A.B.: 55.
- Genito-Urinary Diseases: 248.
- Geography, Physical: Admission, 53.
- Geology: 103.
- Geometry:  
   Admission, 52;  
   High School, 340.
- German: 105;  
   Admission, 49;  
   High School, 372.
- Gifts to the University: 187.
- Graduate Council, The: 61.
- Graduate Courses:  
   Liberal Arts, 62;  
   Law, 267;  
   Pharmacy, 336.
- Graduate Department of Liberal Arts, The: 60.
- Graduation Requirements: See under "Degrees" and "Courses Leading to Degrees, Diplomas and Certificates."
- Greek: 108;  
   Admission, 49;  
   Theology, 321;  
   High School, 369.
- Gymnasium: 176.
- Gynecology: 251, 252.
- Hebrew Language and History: 321.
- High School: 358.

- High School Teacher's Certificate,  
The: 66.
- Histology: 219, 222.
- History: 109;  
Admission, 50, 51;  
High School, 370.
- Homiletics: 322.
- Honors on Graduation: 60;  
See also under "Prizes."
- Hospital Facilities: Medicine, 202;
- Housing: 179.
- Hygiene: 228, 230.
- Industrial History: Admission, 53.
- Intercollegiate Oratorical Contests  
and Debates: 178, 276.
- Italian: 113.
- Jewelry: 356.
- Journalism: 114.
- "Junior Standing" Defined: 57.
- Late Afternoon Classes: 68.
- Laboratories:  
Physics and Electrical Engin-  
eering, 170;  
Biology, 172;  
Marine Station, 174;  
Chemistry, 175;  
Geology, 176;  
Medicine, 198;  
Dentistry, 283.
- Latin: 117;  
Admission, 48;  
High School, 338-339.
- Laryngology: 249.
- Law, College of: 255.
- Liberal Arts, College of: 41.
- Library Facilities:  
Liberal Arts, 169;  
Medicine, 204;  
Law, 256.
- Life Insurance Examination, 244.
- Location, Environment, etc.:  
The University, 10;  
Medicine, 196, 217;  
Law, 255;  
Dentistry, 280;  
Theology, 323;  
Music, 347;  
Fine Arts, 352.
- Marine Biological Station: 76, 174.
- Master of Arts, Degree of: 63;  
With M.D., 65, 214.
- Materia Medica:  
Dentistry, 278;  
Medicine, 235;  
Pharmacy, 331.
- Mathematics: 119;  
Admission, 51;  
High School, 372.
- Matriculation: See "Admission."
- Medical Ethics and Economics: 245.
- Medical Jurisprudence: 243.
- Medicine, College of: See under  
"Physicians and Surgeons, Col-  
lege of."
- Medicine: 237.
- Medicine, History of: 244.
- Microscopy: 231, 234, 330.
- Mining Engineering: 167.
- Missions and Comparative Religion:  
See Religious Education.
- Missions, Foreign: 319.
- Mural Painting: 356.
- Museum, The: 170.
- Music, College of: 347;  
Courses Accepted Toward De-  
gree of A.B., 121.
- Neurology and Psychiatry: 241.
- Night School, College of Law: See  
under "Evening Session."
- Normal Classes: See under "Teach-  
er's Courses," also under "Ed-  
ucation."
- Obstetrics: 251.
- Officers of Administration of the  
University: 15.
- Operative Dentistry: 290.
- Operative Technique and Dental  
Anatomy: 292.
- Ophtalmology: 250.
- Options in Professional Schools: 56.
- Oral Surgery and Anesthesia: 297.
- Oratory, College of: 341;  
Courses Accepted Toward the  
Degree of A.B., 122;  
In College of Law, 274;  
In College of Theology, 320.
- Oriental Studies and General Liter-  
ature: 123;  
Theology, 319.
- Orthodontia: 298.
- Otology: 249.
- Pathology: Medicine, 231;  
Dentistry, 305.
- Pediatrics: 241.
- Pharmacodynamics: 223, 227.
- Pharmacognosy: 235.
- Pharmacy, College of: 326.
- Pharmacy: 328.
- Philosophy and Psychology: 125.
- Physical Education: 129;  
High School, 373.
- Physicians and Surgeons, College of:  
196.
- Physics: 135;  
Admission, 52;  
High School, 373.
- Physiology: 70;  
Admission, 52;  
Medicine, 223;  
Dentistry, 301.
- Physiology, Hygiene and Sanitary  
Science: 334.
- Political Science: 138.
- Pottery: 356.
- Practice Court, The: 273.
- Pre-Legal Course: 259.

- Prizes: Liberal Arts, 172-173;  
 Medicine, 216;  
 Law, 277;  
 Dentistry, 289;  
 Fine Arts, 357.
- Proctology: 249.
- Professional Ethics: 310.
- Prosthetic Dentistry: 293.
- Psychology: 125.
- Public Speaking: Law, 274;  
 Oratory, 342.
- Publications, Student: See under "Trojan" and under "El Rodeo."
- Pyorrhea Alveolaris: 296.
- Radiography: 299.
- Recitals: Oratory, 344;  
 Music, 348.
- Recommendations for High School Teacher's Certificate, Departmental Requirements: See under Liberal Arts department in question.
- Registration: See under "Admission."
- Religious Education: 140, 318.
- Religious Privileges: 178.
- Required Subjects: Liberal Arts, 55;  
 Civil Engineering, 155;  
 Electrical Engineering, 163.
- Residence Requirements:  
 Liberal Arts, 59;  
 Graduate Department of Liberal Arts, 63.
- Rhinology: 249.
- Roentgenology: 242.
- Sacred Oratory: 320.
- Saturday Classes:  
 Liberal Arts, 68.  
 Oratory, 345.
- Scholarships:  
 Liberal Arts, 184;  
 Fine Arts, 357.
- Schedule, College of Law: 268.
- Science: Admission, 53.
- Sculpture: 355.
- Sociology: 145;  
 Theology, 323.
- Sororities: Liberal Arts, 181;  
 Law, 276.
- Spanish: 149;  
 Admission, 50;  
 High School, 373.
- Special Course Leading to Certificate of Expression: 344.
- Special Examinations:  
 Liberal Arts, 59;  
 Law, 261.
- Special Students:  
 Liberal Arts, 44;  
 Law, 261;  
 Dentistry, 287;  
 Pharmacy, 339;  
 Fine Arts, 353;  
 High School, 358.
- Student Organizations and Publications: Liberal Arts, 181;  
 Law, 276;  
 High School, 363.
- Summer Sessions: Calendar, 6;  
 Liberal Arts, 189;  
 Law, 272;  
 Fine Arts, 356.
- Surgery: 246.
- Systematic Theology: 322.
- Teacher's Courses:  
 Music, 349;  
 Fine Arts, 359;  
 See also under "High School Teacher's Certificate."
- Teaching, Practice in: 92.
- Theology, College of: 314.
- Theology, Pastoral: 322.
- Therapeutics: 235.
- Theses:  
 A.M., 64;  
 B.S. in Civil Engineering, 161;  
 B.S. in Electrical Engineering, 167;  
 Phar. B., 336.
- Toxicology: 228.
- Trigonometry:  
 Admission, 52.
- Trojan: 182.
- Trustees, Board of:  
 University, 12;  
 Dentistry, 279.
- Tuition: See under "Fees."
- "Units" defined:  
 Admission, 42;  
 Liberal Arts, 54;  
 Medicine, 206.
- University, The:  
 Board of Trustees, 12-13;  
 Historical, 9;  
 Advantages of Location, 10;  
 Government and Organization, 10.
- University High School: 358;  
 Admission, 358;  
 Courses, 360, 362;  
 Fees and Expenses, 364.
- Vocation Subjects: Admission, 54.
- Venice: 76.
- Women's Club: 180.
- Women's Halls: 179.
- Y. M. C. A. and Y. W. C. A.:  
 Liberal Arts, 178;  
 Medicine, 215;  
 Dentistry, 281.
- Zoology: 72;  
 Admission, 52.







8.794  
2.741

THE  
UNIVERSITY OF SOUTHERN CALIFORNIA  
BULLETIN

VOLUME XII

MARCH 1917

NUMBER 1



YEAR BOOK *for* 1916-1917



UNIVERSITY OF SOUTHERN CALIFORNIA

YEAR BOOK FOR 1916-1917

THE  
MUSEUM  
OF  
THE  
MUSEUM

THE  
MUSEUM  
OF  
THE  
MUSEUM

THE  
MUSEUM  
OF  
THE  
MUSEUM



# UNIVERSITY OF SOUTHERN CALIFORNIA BULLETIN

VOLUME XII

MARCH 1917

NUMBER 1



## YEAR BOOK FOR 1916-1917

WITH ANNOUNCEMENTS FOR

1917-1918

Published Bi-monthly by the University

Entered as Second Class Matter under Act of Congress, July 16, 1894

Los Angeles, California

82



# TABLE OF CONTENTS

CALENDAR .....	6
DIRECTORY .....	8
THE UNIVERSITY: History and Government.....	9
The Faculty .....	17
THE COLLEGE OF LIBERAL ARTS:	
The Undergraduate Courses.....	39
The Graduate Department.....	52
Departments of Instruction.....	59
Engineering .....	142
General Information .....	157
The Summer Session.....	175
THE COLLEGE OF PHYSICIANS AND SURGEONS:	
General Statement .....	178
Departments of Instruction.....	199
THE COLLEGE OF LAW:	
General Statement .....	231
Departments of Instruction.....	237
THE COLLEGE OF DENTISTRY:	
General Statement .....	253
Departments of Instruction.....	265
THE COLLEGE OF THEOLOGY:	
General Statement .....	288
Departments of Instruction.....	291
THE COLLEGE OF PHARMACY:	
General Statement .....	302
Departments of Instruction.....	304
THE COLLEGE OF MUSIC.....	315
THE COLLEGE OF ORATORY.....	322
THE COLLEGE OF FINE ARTS.....	327
THE UNIVERSITY HIGH SCHOOL.....	333
CATALOGUE OF STUDENTS.....	347
INDEX .....	441

# CALENDAR

## Applying to all Colleges

### 1917

- Nov. 29 to Dec. 1 . Thanksgiving Recess.  
December 19 . . . Christmas Recess begins.

### 1918

- January 3 . . . Work resumed after Christmas Recess.  
February 7 . . . Day of Prayer for Colleges.  
February 22 . . . Washington's Birthday Recess.  
May 30 . . . Memorial Day Recess.  
June 2 . . . Baccalaureate Sunday.  
June 6 . . . Commencement Day.

## College of Liberal Arts

### 1917

- July 2 to Aug. 10 . Summer Session.  
September 10 to 12 . Registration for the First Semester.  
September 13 . . Instruction begins.

### 1918

- January 24 . . . Mid-year Examinations begin.  
January 31 . . . Second Semester begins.  
April 1-9 . . . Spring Vacation.  
May 28 to June 5 . Final Examinations.

## College of Physicians and Surgeons

### 1917

- June 18 to Sept. 8 . Summer Session.  
Aug. 29 to Sept. 1 . Entrance and Special Examinations and Registration.  
September 4 . . . Instruction begins.

### 1918

- January 2 . . . Second Trimester begins.  
March 4 . . . Third Trimester begins.

## College of Law

### 1917

- June 11 to Aug. 10 . Summer Session.  
September 10 to 12 . Registration for the First Semester.  
September 13 . . . Instruction begins, First Semester.

### 1918

- January 22 . . . Mid-year Examination and Registration for the Second Semester begins.  
January 29 . . . Instruction begins, Second Semester.  
May 13 . . . Final Examinations begin.

## **College of Dentistry**

**1917**

- October 3 . . . Opening Assembly.  
October 4 . . . Registration and Instruction begin.  
October 12 . . . Registration closes for the year.

**1918**

- May 13 . . . Freshman and Junior Examinations begin.

## **College of Theology**

**1917**

- October 8 . . . Registration begins, First Semester.  
January 17 . . . Mid-year Examinations begin.  
January 21 . . . Second Semester begins.  
April 1 to 8 . . . Spring Vacation.  
May 20 . . . Final Examinations begin.

## **College of Pharmacy**

**1917**

- October 1 . . . Registration begins, First Semester.  
October 4 . . . Instruction begins.

**1918**

- February 4 . . . Mid-year Examinations begin.  
April 1 to 8 . . . Spring Vacation.  
May 30 . . . Final Examinations begin.

## **College of Music**

**1917**

- September 10 . . . Instruction begins, First Semester.

**1918**

- January 31 . . . Second Semester begins.

## **College of Oratory**

**1917**

- July 2 to Aug. 10 . . . Summer Session.  
September 20 . . . Instruction begins.

**1918**

- February 1 . . . Mid-year Examinations begin.  
February 7 . . . Second Semester begins.  
April 1 to 8 . . . Spring Vacation.  
June 13 to 19 . . . Final Examinations.

## **College of Fine Arts**

- June 28 to Aug. 18 . . . Summer Session.  
September 17 . . . Instruction begins, First Semester.  
January 21 . . . Mid-year Examinations begin.  
January 28 . . . Second Semester begins.  
May 30 . . . Final Examinations begin.



# DIRECTORY

THE COLLEGE OF LIBERAL ARTS

Thirty-fifth Street and University Avenue.

THE COLLEGE OF PHYSICIANS AND SURGEONS

516 East Washington Street.

THE COLLEGE OF LAW

Tajo Building, First Street and Broadway.

THE COLLEGE OF DENTISTRY

Sixteenth and Los Angeles Streets.

THE COLLEGE OF THEOLOGY

Thirty-fifth Place and Hoover Street.

THE COLLEGE OF PHARMACY

Thirty-fifth Street and University Avenue.

THE COLLEGE OF MUSIC

3201 S. Figueroa Street.

THE COLLEGE OF ORATORY

Thirty-fifth Street and University Avenue.

THE COLLEGE OF FINE ARTS

201 North Avenue 66.

THE UNIVERSITY HIGH SCHOOL

Thirty-fifth Street and University Avenue.

THE MARINE BIOLOGICAL STATION

Venice, California.

Information concerning any of the colleges, and yearbooks containing the courses of study, etc., will be mailed upon application to the Registrar of the University.

# THE UNIVERSITY

## HISTORICAL

In response to a general feeling that the interests of Christian education demanded the establishment of an institution of higher learning in Southern California, plans were early matured which resulted in the founding, in the City of Los Angeles, of the University of Southern California. On July 29, in the year 1879, the original deed of trust was executed by Ozro W. Childs, Isaias W. Hellman, and John G. Downey, donors, to A. M. Hough, J. P. Widney, E. F. Spence, M. M. Bovard, G. D. Compton, and R. M. Widney, as Trustees. On August 8 of the following year, 1880, the incorporation of the University was effected under the title, "The University of Southern California." The name of the corporation has since been changed to "University of Southern California."

The first Board of Directors consisted of eleven persons, namely: A. M. Hough, Charles Shelling, E. F. Spence, P. Y. Cool, S. C. Hubbell, E. S. Chase, P. M. Green, J. G. Downey, R. M. Widney, J. A. Van Anda, and F. S. Woodcock. These, together with the trustees and the original donors of the trust, may be fairly held to represent the founders of the University. The corporation as at present constituted consists of thirty Trustees.

The Articles of Incorporation provide that the Trustees shall be elected by the Southern California Annual Conference of the Methodist Episcopal Church.

The first building was erected on the present campus site in 1880, and on October 4 of the same year the institution was formally opened for the reception of students, and the work of instruction was begun. Men and women are admitted to all departments of the University on the same conditions. Although requiring no particular religious faith of its instructors and students, the institution, in accordance with the fundamental aim of its founders, stands for the effective promotion of Christian culture.

## THE GOVERNMENT OF THE UNIVERSITY

The government of the University is committed to a Board of thirty Trustees. This Board has the power to elect professors and other officers of instruction, to confer degrees, to manage the property of the University Corporation, and to determine the general policy of the institution.

The President has charge of the educational administration of the University and is chairman of the University Council. The principal administrative officers, other than the President, are the Deans, who have immediate charge of the work of the several faculties.

The University Council is a representative body, consisting of the President, and the Dean and the Secretary (or some other member of the faculty) of each of the several colleges. It is the duty of the Council to consider the courses offered by the several colleges with a view to increasing the efficiency and enlarging the range of University work, to encourage original research, to adjust all questions involving more than one of the colleges, and to advise the President upon such matters as he may bring before it.

### ADVANTAGES OF LOCATION

Los Angeles is the metropolis of Southern California. Its population of about 500,000 represents every State in the Union and many foreign lands. Its importance as a political and metropolitan center gives the students of the University unusual opportunities for observation and investigation along many lines, both cultural and professional.

The climate throughout the year is such that tourists from every quarter come to spend a part of the year, and many return to make this their permanent home.

It is the greatest railroad center on the Pacific Coast. Four transcontinental lines are now complete. A network of electric roads connects the city with the numerous beaches, mountain resorts, and outlying towns. These are reached by delightful journeys through orange groves and orchards of the semi-tropical fruits characteristic of this region.

It is known as the Convention City of the West. Every year brings large bodies of people here for the discussion of every kind of public interest known to science, politics, religion, and the humanities. These great conventions afford the student an excellent opportunity to study the subjects of their discussion; and the resident population of the city is sufficiently large to afford important advantages for the study of sociology and kindred subjects.

The diverse viewpoints of the groups of students in the nine colleges make their association an important cultural factor in their lives.

The University campus is in close proximity to Exposition Park, in which more than a million dollars have been recently

expended in erecting and equipping buildings and beautifying the grounds. The State Building contains exhibits of the products, mineral and vegetable, of the various counties of the State. The Museum of History, Science and Art contains the valuable collections of The Historical Society of Southern California, The Academy of Sciences, The Cooper Ornithological Society, The Fine Arts League of Los Angeles, and numerous private collections. Because of their easy access, these collections afford special advantages to the students and faculties of the University.

The fifty-five acres of the park athletic grounds are available and afford ample facilities for all outdoor sports, making a valuable auxiliary to Bovard Field with its new Stadium seating over 8000.

# OFFICIAL BOARDS

## THE BOARD OF TRUSTEES

### Term Expires in 1917

BISHOP EDWIN HOLT HUGHES, D.D., LL.D.	Walden Mass.
GEORGE I. COCHRAN, A.M., LL.D.	Pacific Mutual Bldg.
WILLIAM F. CRONEMILLER	936 S. Alvarado
JOHN B. GREEN, A.B., D.D.	501 Exchange Bldg.
EDWARD P. JOHNSON	211 Security Bldg.
FRANCES M. LARKIN, Ph.D., D.D.	San Francisco, Cal.
CHARLES EDWARD LOCKE, D.D., LL.D.	728 Berendo St.
CHARLES A. PARMELEE	744 S. Carondelet
A. E. POMEROY, A.M.	700 Grant Bldg.
FRANK G. H. STEVENS, A.B.	Pomona, Cal.

### Term Expires in 1918

JULIUS A. BROWN	2277 Hobart Blvd.
GEORGE L. HAZZARD, A.M.	Whittier, Cal.
EZRA A. HEALY, A.M., D.D.	841 W. 36th Street
GAIL B. JOHNSON	Pacific Mutual Bldg.
BISHOP ADNA W. LEONARD, LL.D.	San Francisco
S. P. MULFORD	615 Van Nuys Bldg.
WILLIAM D. STEPHENS	1108 W. 27th St.
FRANCIS Q. STORY	Alhambra, Cal.
STEPHEN TOWNSEND	Long Beach, Cal.
FRANK S. WALLACE	Pasadena, Cal.

### Term Expires in 1919

WESLEY W. BECKETT, M.D.	Pacific Mutual Bldg.
GEORGE FINLEY BOVARD, A.M., D.D., LL.D.	University
WILLIAM M. BOWEN, LL.D.	Washington Bldg.
HENRY W. BRODBECK, D.D.S.	Van Nuys Bldg.
JOSEPH E. CARR	Los Angeles Investment Bldg.
PRESCOTT F. COGSWELL	El Monte, Cal.
B. C. COREY, A.M.	San Fernando
JAMES ALLEN GEISSINGER, D.D.	Long Beach
ALFRED INWOOD, D.D.	3030 Kenwood Avenue
ALBERT J. WALLACE, LL.D.	Union Oil Bldg.

### Officers of the Board

BISHOP ADNA W. LEONARD	President
J. E. CARR	Vice-President
A. E. POMEROY	Secretary
GEORGE I. COCHRAN	Treasurer and Financial Agent

**Note**—Where no other city or town is mentioned, the address is understood to be Los Angeles.



# Executive Committee

BISHOP ADNA W. LEONARD

GEORGE I. COCHRAN  
J. E. CARR  
GEORGE F. BOVARD  
W. M. BOWEN  
JULIUS A. BROWN  
S. P. MULFORD

J. B. GREEN  
E. A. HEALY  
ALBERT J. WALLACE  
A. E. POMEROY  
W. F. CRONEMILLER  
CHARLES E. LOCKE

## BOARD OF CONTROL OF DEPARTMENT OF LAW

GEORGE F. BOVARD, A.M., D.D., LL.D.....University  
GEORGE I. COCHRAN, A.M., LL.D.....Pacific Mutual Bldg.  
GAVIN W. CRAIG, LL.M.....Hall of Justice  
THOMAS W. ROBINSON, A.M.....Hall of Records  
FRANK M. PORTER, A.B., LL.M.....Tajo Bldg.  
HARTLEY SHAW, Ph.B.....Stimson Bldg.  
A. J. WALLACE, LL.D.....Union Oil Bldg.

## ADVISORY COUNCIL, MARINE STATION

GEORGE FINLEY BOVARD, A.M., D.D., LL.D.....University  
GEORGE I. COCHRAN, A.M., LL.D.....Pacific Mutual Bldg.  
EZRA A. HEALY, A.M., D.D.....841 W. 36th Street  
ABBOTT KINNEY.....Venice, Cal.  
WALTER LINDLEY, M.D., LL.D.....2007 S. Figueroa St.  
GENERAL M. H. SHERMAN.....Hotel Westminster  
ARTHUR B. BENTON.....114 N. Spring St.

## ADVISORY BOARD, COLLEGE OF PHARMACY

CHARLES W. BRYSON, M.D.....401 Delta Bldg.  
L. N. BRUNSWIG.....Brunswick Drug Co.  
F. W. BRAUN.....The Braun Corporation  
L. D. POWERS, M.D.....City Hall  
W. R. DICKINSON.....Dean Drug Co.  
J. J. FREEMAN.....10th and Grand Ave.  
FRANK N. DRAKE.....Sun Drug Co.  
A. J. NEVE.....Owl Drug Co.

## BOARD OF TRUSTEES, COLLEGE OF DENTISTRY

CHARLES D. LOCKWOOD, A.B., M.D., F.A.C.S.....President  
GARRETT NEWKIRK, M.D.....Vice-President  
JAMES D. McCOY, D.D.S.....Secretary  
J. WALTER GRAY, D.D.S.....Treasurer  
GEO. F. BOVARD, A.M., D.D., LL.D.  
CHARLES M. BENBROOK, D.D.S. CHAS. D. LOCKWOOD, D.D.S.  
D. CAVE, D.D.S. W. C. SMITH, D.D.S.

**CONFERENCE BOARD OF EDUCATION****Term Expires in 1917**

H. W. WHITE, C. H. M. SUTHERLAND, W. E. TILROE, C. B. DALTON, GEO. N. KING, C. I. D. MOORE, W. L. FREW, A. J. VISEL.

**Term Expires in 1918**

H. S. RYDER, C. M. CRIST, R. D. HOLLINGTON, R. J. TAYLOR, DR. C. S. STODDARD, W. S. ALLEN, M. M. PARKER, E. P. CLARK.

**Term Expires in 1919**

CHARLES E. LOCKE, C. H. SCOTT, H. E. MURKETT, C. P. METCALF, EGERTON SHORE, A. M. DREW, C. P. CLOCKE, WILBUR G. FISKE.

**ALUMNI ASSOCIATION PRESIDENTS****LIBERAL ARTS:**

E. A. Henderson.....3600 University Ave.

**MEDICINE:**

Dr. Robert Dunsmoor.....Garland Building

**DENTISTRY:**

Dr. B. B. McClellan.....Baker-Detwiler Building

**FINE ARTS:**

Stella Lambert.....206 South Avenue 55

**LAW:**

Hugh M. Wells.....318 Security Building

**MUSIC:**

Mrs. H. E. Hauch.....Fullerton, Cal.

**ORATORY:**

Henrietta Davies.....1109 Ingraham St.

**PHARMACY:**

James S. Sharpe.....Newhall, Cal.

**THEOLOGY:**

Howard V. Clark.....El Centro, Cal.

# OFFICERS OF ADMINISTRATION AND INSTRUCTION

## OFFICERS OF ADMINISTRATION

- GEORGE FINLEY BOVARD, A.M., D.D., LL.D.  
President. On the Gaylord Hartupee Endowment
- GEORGE I. COCHRAN, A.M., LL.D.  
Treasurer and Financial Agent
- JOHN HAROLD MONTGOMERY, M.S., E.E.  
Registrar.
- THOMAS BLANCHARD STOWELL, Ph.D., LL.D.  
Chairman of the Graduate Council
- CHARLES WILLIAM BRYSON, A.B., M.D.  
Dean of the College of Physicians and Surgeons
- FRANK MONROE PORTER, A.B., LL.M.  
Dean of the College of Law
- LEWIS EUGENE FORD, D.D.S.  
Dean of the College of Dentistry
- EZRA ANTHONY HEALY, A.M., S.T.D.  
Dean of the College of Theology
- LAIRD JOSEPH STABLER, M.S., Ph.C., Ss.D.  
Dean of the College of Pharmacy
- WALTER FISHER SKEELE, A.B.  
Dean of the Collège of Music
- WILLIAM LEES JUDSON  
Dean of the College of Fine Arts
- BEULAH WRIGHT,  
Dean of the College of Oratory
- ALBERT BRENNUS ULREY, A.M.  
Director of the Marine Biological Station
- HUGH CAREY WILLETT, A.M.  
Principal of the University High School

MARYETTE G. MACKEY, A.M.

Dean of Women, College of Liberal Arts

STANLEY F. McCLUNG,

Assistant Treasurer

WARREN BRADLEY BOVARD,

Assistant Financial Agent

CHARLOTTE MAUD BROWN.

Librarian.

DEAN CROMWELL

Director of Competitive Athletics.

CHESTER HERBERT BOWERS, A.M., M.D.

Medical Examiner of Men.

ELSA HENRIETTA HORSTMANN, M.D.

Medical Examiner of Women and Lecturer on  
Health and Development.

CURTIS FERDINAND HUSE,

Superintendent of Buildings and Grounds.

# THE FACULTY

## PROFESSORS

DAVID C. ALLISON.....	1405 Hibernian Bldg.
Associate in Architecture.	
PAUL ARNOLD, Ph.M.....	1241 W. 47th St.
Professor of Mathematics.	
GILBERT ELLIS BAILEY, A.M., Ph.D.....	9728 Figueroa St.
Professor of Geology.	
JOHN VINCENT BARROW, S.B., M.D.....	
1207-8 Baker-Detwiler Bldg.	
Assistant Professor of Medicine.	
CATHERINE VIRGINIA BEERS, A.M.....	941 W. 34th St.
Assistant Professor of Biology.	
MYRTLE EMILY BILES, A.M.....	229 W. 31st St.
Associate Professor of German.	
JAMES BLACKLEDGE, A.M.....	503 S. Cummings
Professor of Hebrew Language and Literature.	
BRUCE O. BLIVEN, A.B.*.....	1583 W. 45th St.
Professor of Journalism.	
JOHN H. BLUMENBERG, Phar.B.....	2230 W. 30th St.
Assistant Professor of Pharmacy.	
EMORY STEPHEN BOGARDUS, A.M., Ph.D.....	
Professor of Sociology.	1133 W. 41st St.
MARGARET GRAHAM BORTHWICK, A.B.....	
7316 Mesa Drive, Hyde Park	
Professor of the German Language and Literature.	
HENRY G. BRAINERD, A.B., M.D.....	Exchange Bldg.
Emeritus Professor of Medicine.	
RUTH WENTWORTH BROWN, A.M.*.....	2659 Romeo St.
Professor of the Latin Language and Literature.	
CHARLES C. BROWNING, M.D.....	601 Merritt Bldg.
Professor of Diseases of the Chest.	

---

\*On leave of absence 1916-1917.



- CHARLES WILLIAM BRYSON, A.B., M.D.....  
808-815—Citizens Nat. Bank Bldg.  
Dean of the College of Physicians and Surgeons, and  
Professor of Gynecology, Abdominal and Clinical  
Surgery.
- ARTHUR DERMONT BUSH, B.S., M.D.....  
3012 La Salle Ave.  
Professor of Physiology and Pharmacodynamics.
- KEMPER B. CAMPBELL, LL.M.....810 California Bldg.  
Professor of Torts, Real Property, Practice.
- EDNA AGNES COCKS, A.M.....1167 W. 31st St.  
Associate Professor of Physical Education and Direc-  
tor of the Women's Gymnasium.
- GERTRUDE COMSTOCK, Ph.B.....685 S. Witmer St.  
Associate Professor of Interpretation.
- CLARENCE WESTGATE COOK, A.M., B.S. (in C.E.)  
5932 Woodlawn Ave.  
Associate Professor of Civil Engineering.
- GAVIN W. CRAIG, LL.M. (Judge of the Superior  
Court).....Hall of Justice  
Professor of Elementary Law, Water Rights and  
Irrigation Law, Securities.
- CLARENCE HOLMES CRILEY, Ph.B., M.D.....  
404 Auditorium Bldg.  
Associate Professor of Anatomy.
- CLOYDE DUVAL DALZELL.....2817 W. 7th St.  
Associate Professor of Dramatics.
- ANSTRUTHER DAVIDSON, C.M., M.B., M.D.....  
1018 Los Angeles Investment Bldg.  
Associate Professor of Dermatology.
- HENRY DIETRICH, M.D.....917 Brockman Bldg.  
Associate Professor of Pediatrics.
- JAMES MAIN DIXON, A.M., L.H.D., F.R.S.E.....  
427 N. Ardmore Ave.  
Director of Oriental Studies and Professor of Literature.
- FRANK P. DOHERTY, LL.B.....Merchants' Nat. Bank Bldg.  
Professor of Damages.
- CLAUDE C. DOUGLAS, A.M.....930 W. 35th St.  
Professor of New Testament Greek.

- MELVIN ELLIS, Ph.D., M.D.....Consolidated Realty Bldg.  
Associate Professor of Anatomy.
- JULIO ENDELMAN, D.D.S.....College of Dentistry Bldg.  
Professor of Special Pathology, Therapeutics and  
Materia Medica, and College Librarian.
- C. J. R. ENGSTROM, D.D.S.....Brockman Bldg.  
Professor of Prosthesis.
- B. F. ESHELMAN, D.D.S.†.....Story Bldg.  
Professor of Ceramic Art.
- EDGAR MAXMILIAN von FINGERLIN, Ph.D.....  
Santa Monica  
Professor of the Italian and French Languages and  
Literatures.
- JAMES TUCKER FISHER, M.D.....1012 Brockman Bldg.  
Professor of Neurology and Psychiatry.
- RALPH TYLER FLEWELLING, A.M., S.T.B., Ph.D.\*  
Professor of Philosophy.
- LEWIS E. FORD, D.D.S.....L. A. Investment Bldg.  
Dean of the College of Dentistry and Professor of  
Clinical Dentistry.
- KATHERINE TORRANCE FORRESTER.....643 W. 32d St.  
Professor of the Spanish Language and Literature.
- F. W. FRAHM, D.D.S.....College of Dentistry Bldg.  
Professor of Crown and Bridge Work.
- ALLISON GAW, A.M., Ph.D.....1259 W. 35th St.  
Professor of the English Language and Literature.
- LESLIE F. GAY, JR., AM.\*\*.....2889 Idell St.  
Associate Professor of History.
- THOMAS H. GLENN, A.B., Ph.D., M.D.....  
128 N. Ardmore St.  
Professor of Pathology, Bacteriology and Clinical  
Microscopy.
- RALPH T. GOODWIN, A.B., Ph.C.....1125 W. 30th St.  
Assistant Professor of Materia Medica and Pharma-  
cognosy.

\*Begins work September, 1917.

\*\*On leave of absence 1916-17.

†Deceased.

- LEWIS A. GROFF.....717 Trust & Savings Bldg.  
Professor of Mining Law and History of Jurisprudence.
- FREDERICK S. HAMMETT, A.B., M.S., A.M., Ph.D.  
2343 Scarff St.  
Professor of Physiology, Pharmacodynamics, and Dietetics.
- PERCY V. HAMMON, LL.B.....410 H. W. Hellman Bldg.  
Professor of Criminal Law, Criminal Procedure.
- BYRON C. HANNA, LL.B.....1101 Merchants' Nat. Bk. Bldg.  
Professor of Public Corporations, California Codes.
- WAYNE P. HANSON, M.D.....1001 L. A. Investment Bldg.  
Associate Professor of Anatomy.
- EZRA A. HEALY, A.M., S.T.D.....855 W. 36th Street  
Dean of the Maclay College of Theology and Professor of Systematic Theology.
- HENRY HERBERT, M.D.....710-720 Hollingsworth Bldg.  
Associate Professor of Physical Diagnosis.
- JOHN GODFREY HILL, A.M., S.T.B., Ph.D.....  
854 W. 35th Place  
Professor of Religious Education and Hazzard Professor of the English Bible and Philosophy.
- ERNEST BRYANT HOAG, A.M., M.D.....705 Fay Bldg.  
Assistant Professor of Pediatrics.
- ERNEST J. HOPKINS.....1035 W. 35th St.  
Associate Professor of Journalism.
- FREDERICK W. HOUSER (Judge of the Superior Court).....Hall of Records  
Professor of Private Corporations.
- HENRY W. HOWARD, M.D.....800 Auditorium Bldg.  
Assistant Professor of Gynecology.
- WALTER LESLIE HUGGINS, Ph.B., M.D.....  
627 Consolidated Realty Bldg.  
Associate Professor of Surgery.
- AUGUST HUND, E.E., Eng.D.....1150 W. 29th St.  
Assistant Professor of Electrical Engineering.
- ROCKWELL DENNIS HUNT, A.M., Ph.D.....  
Professor of Economics. 824 W. 35th Place

- B. HOWARD JACKSON, M.E., M.A.....  
Assistant Professor of Physics (ad interim).
- EDWARD DOUGLASS JONES, M.D.....  
208 Consolidated Realty Bldg.  
Associate Professor of Therapeutics.
- A. HALDEN JONES, A.B., M.D.....Bradbury Bldg.  
Professor of Physics, Chemistry and Metallurgy.
- WILLIAM LEES JUDSON.....201 S. Avenue 66  
Dean of the College of Fine Arts and Professor of  
Art and Design.
- GEORGE F. KENNGOTT, B.D., Ph.D...1016 Gramercy Place  
Associate Professor of Sociology.
- BERTHA JOSEPHINE JACOBY-KIENLE, A.M.....  
Associate Professor of German. 1088 W. 31st St.
- FRANK JOSEPH KLINGBERG, A.M., Ph.D.....  
3757 Dalton Ave.  
Professor of Modern European History.
- TULLY CLEON KNOLES, A.M.....1204 W. 31st St.  
Professor of History.
- CARL SUMNER KNOPF, A.M.....829 W. 36th St.  
Assistant Professor of Religious Education.
- JOHN JOHNSON KYLE, B.S., M.D.....702 Title Ins. Bldg.  
Professor of Otology, Laryncology and Rhinology.
- WILLIAM RALPH LAPORTE, A.M.....925½ W. 35th Place  
Professor of Physical Education and Director of  
Men's Gymnasium.
- FRANK JAMES LEAVITT, M.D.....159 S. Western Ave.  
Assistant Professor of Medicine.
- ETHEL LEONARD, B.S., M.D.....Marsh-Strong Bldg.  
Professor of Bacteriology.
- ANDREW CREAMOR LIFE, A.M.....1370 W. 36th Place  
Professor of Botany.
- CHARLES D. LOCKWOOD, A.B., M.D., F.A.C.S.....  
Professor of Oral Surgery. Pasadena
- GEORGE JESSE LUND, M.D.....414-17 Auditorium Bldg.  
Associate Professor of Otology, Laryngology and  
Rhinology.

- HOWARD LESLIE LUNT, A.M.....5300 Pasadena Ave.  
Associate Professor of Education.
- CHARLES WALTER LAWRENCE, B.S., C.E.....  
Professor of Civil Engineering. 659 N. Alexandria Ave.
- ARTHUR R. MAAS, Ph.C.....1121 W. 51st Place  
Professor of Pharmacy and Materia Medica.
- MARYETTA G. MACKEY, A.M.....677 Valencia St.  
Dean of Women, College of Liberal Arts, and  
Assistant Professor of the English Language and  
Literature.
- ROY MALCOM, A.M., Ph.D.....619 S. Carondelet  
Professor of Political Science.
- CHARLES C. MANGER, Ph.G., M.D.....  
1106-07 Marsh-Strong Bldg.  
Professor of Neuropathology and Clinical Neurology.
- OLIVER JONES MARSTON, A.M.....1186 W. 31st Street  
Associate in Economics.
- PAUL J. McCORMICK (Judge of the Superior Court)....  
Hall of Records  
Professor of Criminal Law, Criminal Procedure.
- GEORGE WASHINGTON McCOY, A.M., M.D.....  
636 Security Bldg.  
Associate Professor of Ophthalmology.
- JAMES D. McCOY, D.D.S.....Brockman Bldg.  
Professor of Orthodontia and Radiography, and  
Secretary of the Dental Faculty.
- JOHN R. McCOY, D.D.S.....Brockman Bldg.  
Assistant Professor of Orthodontia.
- THOMAS JEFFERSON McCOY, M.D.....636 Security Bldg.  
Professor of Anatomy, Histology and Embryology.
- VICTOR R. McLUCAS, A.B., LL.B.....908 Security Bldg.  
Professor of Common Law Pleading, Wills, Re-  
search, Conflicts of Law.
- EDWIN R. McMATH, A.M.....817 W. 32nd Street  
Associate Professor of Education.
- LYLE GILLET McNEILE, M.D.....626 Marsh-Strong Bldg.  
Professor of Obstetrics.



JAMES S. McKNIGHT, LL.B.....402 H. W. Hellman Bldg.  
Professor of Constitutional Law.

FITCH C. E. MATTISON, M.D.....  
326-33 Chamber of Com. Bldg., Pasadena, Cal.  
Professor of Surgery.

CHAS. C. MONTGOMERY, A.B., LL.B.....908 Security Bldg.  
Professor of Equity Jurisprudence and Procedure,  
Federal Jurisdiction and Procedure, Jurisdiction and  
Judgments, Extraordinary and Provisional Remedies,  
Restraints of Trade.

JOHN HAROLD MONTGOMERY, M.S., E.E.....  
1319 W. 37th Place  
Registrar of the University and Professor of Physics  
and Electrical Engineering.

VINCENT MORGAN, LL.B.....502 Exchange Bldg.  
Professor of Code Pleading, Domestic Relations,  
Senior Real Property.

W. R. MOLONY, M.D.....Bradbury Bldg.  
Professor of Anatomy.

GARRETT NEWKIRK, M.D.....Pasadena, Cal.  
Professor of Hygiene and Ethics.

ARTHUR WICKES NYE, B.S., M.E.....843 S. Ardmore Ave.  
Professor of Physics and Electrical Engineering, and  
Director of the Laboratory.

FESTUS EDWARD OWEN, A.M.....621 W. 34th St.  
Professor of Psychology.

P. C. H. PAHL, M.D.....1015 Baker-Detwiler Bldg.  
Associate Professor of Orthopedic Surgery, Frac-  
tures and Dislocations and Chief of Washington  
Street Clinic.

EDGAR PALMER, D.D.S.....922 S. Bonnie Brae St.  
Emeritus Dean, College of Dentistry.

CHARLES E. PEMBERTON.....678 S. Burlington Ave.  
Professor of Violin, Harmony, Counterpoint, His-  
tory and Musical Theory.

CHARLES EATON PHILLIPS, A.B., M.D.....  
Assistant Professor of Surgery. 527 W. Seventh St.

- FRANK M. PORTER, A.B., LL.M.....Tajo Bldg.  
Dean of the College of Law and Professor of Evidence, Bailments and Carriers, Personal Property and Sales.
- F. M. POTTENGER, A.M., M.D., LL.D.....  
1100-1 Title Insurance Bldg.  
Professor of Diseases of the Chest.
- J. WALTER REEVES, A.B., M.D.....Marsh-Strong Bldg.  
Professor of Physiology and General Pathology.
- LEWIS D. REMINGTON, M.D.....Monrovia, Cal.  
Assistant Professor of Diseases of the Chest.
- W. W. RICHARDSON, M.D.....602 Brockman Bldg.  
Professor of Surgery.
- LAWRENCE MELVILLE RIDDLE, A.M.....  
1270 W. 37th Drive  
Professor of the French Language and Literature.
- SAMUEL RITTENHOUSE, Ph.D.....1056 W. 47th St.  
Associate Professor of Zoology.
- JAMES G. SCARBOROUGH, A.B.....1225 Washington Bldg.  
Professor of Code Pleading.
- ROY EDWIN SCHULZ, A.B.....Alhambra  
Professor of the Spanish Language.
- M. PAULINE SCOTT, A.M.....3006 S. Grand  
Assistant Professor of English Language and Literature.
- JAMES HARVEY SEYMOUR, M.D.....502 Brockman Bldg.  
Member of the Judicial Council and Professor of Surgery and Clinical Surgery.
- HARLAN SHOEMAKER, A.B., M.D.....  
621 Marsh-Strong Bldg.  
Assistant Professor of Surgery.
- WALTER FISHER SKEELE, A.B.....136 E. Avenue 55  
Dean of the College of Music and Professor of Piano and Pipe Organ.
- EVA MAE SMITH, A.B.....1313 W. 8th St.  
Assistant Professor of Oratory.
- ALBERT SOILAND, M.D.....527 W. Seventh St.  
Professor of Roentgenology.

- HENRY E. SOUTHWORTH, M.D.....  
709-717 Wright & Callender Bldg.  
Associate Professor of Gynecology.
- FREDERICK A. SPEIK, S.B., M.D.....800 Auditorium Bldg.  
Professor of Medicine.
- LAIRD JOSEPH STABLER, M.S., Ph.C., Sc.D.....  
1120 W. 30th St.  
Dean of the College of Pharmacy and Professor of  
Applied Chemistry and Metallurgy.
- BENJAMIN F. STELTER, A.M., Ph.D.....1083 W. 35th St.  
Professor of the English Language and Literature.
- LYMAN BRUMBAUGH STOOKEY, A.M., Ph.D.....  
640 Consolidated Realty Bldg.  
Professor of Experimental Physiology.
- THOMAS BLANCHARD STOWELL, A.M., Ph.D., LL.D.  
2702 Hobart Blvd.  
Chairman of the Graduate Council and Professor of  
Education.
- CLAIR S. TAPPAAN, LL.B.....815 Black Bldg.  
Professor of Contracts (including Quasi Contracts,  
Partnerships, Agency, Guaranty and Suretyship),  
Bills and Notes.
- W. E. TILROE, B.D., D.D.....1017 W. 34th St.  
Professor of Homiletics and Pastoral Theology.
- E. F. THOLEN, M.D., D.D.S.....Brockman Bldg.  
Associate Professor of Oral Surgery.
- DAVID D. THORNTON, M.D...Wright and Callender Bldg.  
Associate Professor of Oral Surgery.
- A. C. LA TOUCHE, D.D.S.....College of Dentistry Bldg.  
Professor of Operative Dentistry, General and Dental  
Histology and Superintendent of the College.
- E. W. TUTTLE, LL. B.....624 S. Spring St.  
Professor of Admiralty, History of Common Law.
- ALBERT BRENNUS ULREY, A.M.....1435 W. 23rd St.  
Professor of Biology and Director of the Marine  
Biological Station.
- LEROY SAMUEL WEATHERBY, A.M., Ph.D.....  
Professor of Chemistry. 1299 W. 37th Drive

- ARTHUR CLASON WEATHERHEAD, A.M.....  
Professor of Drawing. 605 W. Jefferson
- HUGH NEAL WELLS, LL.B.....Security Bldg.  
Debating, Public Speaking and Parliamentary Law.
- WALTER F. WESSELS, M.D.....933 Title Insurance Bldg.  
Associate Professor of Surgery.
- HARRY OSCAR WHITE, M.D.....  
Professor of Anatomy, Histology and Embryology.
- CHARLES H. WHITMAN, M.D.....County Hospital  
Professor of Clinical Surgery.
- ELIZA G. WILKINS, A.M., Ph.D.....1116 W. 30th St.  
Professor of the Greek and Latin Languages and  
Literatures.
- ARTHUR P. WILL, LL.M.....Title Insurance Bldg.  
American Diplomacy, Trust and Monopolies.
- HUGH CAREY WILLETT, A.M.....921 W. 37th Place  
Principal of the University High School and Asso-  
ciate Professor of Mathematics.
- ORVILLE O. WITHERBEE, M.D.....527 W. Seventh St.  
Professor of Surgery and Clinical Surgery.
- PAUL SPENCER WOOD, A.B.....1052 Leighton Ave.  
Professor of the English Language and Literature.
- BEULAH WRIGHT.....344 St. Andrews Place  
Dean of the College of Oratory and Professor of  
Dramatic Art and the Speaking Voice.
- THOMPSON B. WRIGHT, A.M., M.D.....  
Professor of Medicine. Crown Apts., Pasadena, Cal.
- ELIZABETH YODER.....1313 W. 8th St.  
Associate Professor of Dramatic Art and Expression.
- WILLIAM LEANDER ZUILL, M.D.....  
.709-717 Wright & Callender Bldg.  
Professor of Otology, Laryngology and Rhinology.

VISITING PROFESSORS

Summer Session 1916

- RICHARD BURTON, A.M., Ph.D.\*.....Univ. of Minnesota  
Lecturer in English Literature.
- J. A. BIRCHBY, A.M.....Hanford, Cal.  
Professor of Physics.
- GRACE M. FERNALD, Ph.B.....Hollywood  
Professor of Education.
- ERNEST CARROLL MOORE, A.M., Ph.D., LL.D.....  
Lecturer in Education, Harvard University.

LECTURERS

- W. S. ALLEN, A.B., B.D.....927 Title Insurance Bldg.  
Lecturer in Conveyancing.
- L. GORTON AVERY, A.B., M.D.....502 Brockman Bldg.  
Lecturer on Surgery.
- OTTO BAMES, M.D.....1604 W. 39th St.  
Lecturer on Materia Medica.
- F. J. BAUM.....1125 W. 40th Place  
Lecturer in Journalism.
- W. J. BELL, D.D.S.....1046 W. 35th Place  
Demonstrator and Lecturer in Electricity.
- THOMAS A. BERKEBILE, LL.M.....  
1015 Hollingsworth Bldg.  
Lecturer in Civil Law, Logic and Comparative Constitutional Law.
- BENJAMIN FRANKLIN BLEDSOE, A.B. (Judge of  
the U. S. District Court).....Federal Bldg.  
Lecturer in Legal Ethics.
- PHIL BÖLLER, A.B., M.D.....515 L. A. Investment Bldg.  
Lecturer on Gynecology.
- WILLIAM M. BOWEN, LL.B.....1225 Washington Bldg.  
Counsellor in Forensics.
- BERT BOYD, D.D.S.....Story Bldg.  
Lecturer on Hygiene and Ethics.



INGLE CARPENTER, Ph.B., LL.B.....California Bldg.  
Lecturer on Dental Jurisprudence.

JOHN MacKENZIE BROWN, M.D., F.A.C.S.....  
Brockman Bldg.  
Lecturer in Rhinology and Laryngology.

E. W. CAMP, A.B., LL.B.....Santa Fe Ry., Kerckhoff Bldg.  
Lecturer in Interstate Commerce.

ALBERT TUTTON CHARLTON, A.B., M.D.....  
Brockman Bldg.  
Lecturer on Surgery.

W. T. CRAIG, Ph.D.....731 Higgins Bldg.  
Lecturer in Bankruptcy.

R. S. CUMMINGS, M.D.....Merchants National Bank Bldg.  
Lecturer on Internal Medicine.

FRANK S. DAGGETT.....Exposition Park  
Special Lecturer in Animal Distribution.

REX DUNCAN, M.D.....638 Van Nuys Bldg.  
Lecturer on First Aid to the Injured.

E. LESLIE EAMES, D.D.S.....Auditorium Bldg.  
Lecturer on Prosthesis.

JAMES A. GIBSON (Ex-Supreme Court Commissioner  
and Superior Judge).....Merchants Nat'l Bank Bldg.  
Lecturer in Appeals.

F. L. A. GRAHAM, LL.B.....933 Higgins Bldg.  
Lecturer in Patents.

ARTHUR STANLEY GRANGER, A.B., M.D.....  
705-10 Brockman Bldg.  
Lecturer on Medicine.

GEORGE L. GREER, A.B., LL.B.....1012-14 Hibernian Bldg.  
Lecturer on Medical Jurisprudence.

CARLOS S. HARDY, D.C.L.....519 Trust & Savings Bldg.  
Lecturer in Fraternal Insurance, Medical Jurisprudence.

WILLIAM HAZLETT, LL.B.....601 Trust & Savings Bldg.  
Lecturer in International Law.

JOHN HEDLEY.....Redondo Beach  
Special Lecturer in Chinese History and Civilization.

- CHARLES W. HILL, Ph.G.....326 S. San Pedro St.  
Lecturer on Industrial Chemicals.
- MARGARET T. HODGEN, B.L.....1107½ W. 18th St.  
Lecturer in Economics.
- K. S. INUI.....San Francisco  
Lecturer in Japanese Sociology.
- M. EVANGELINE JORDON, D.D.S.....Marsh-Strong Bldg.  
Special Lecturer on the Care of the Teeth of  
Children.
- JOHN E. KIENLE, A.M.....1088 W. 31st St.  
Lecturer in Sociology.
- W. H. KIGER, M.D.....Consolidated Realty Bldg.  
Lecturer on Proctology.
- E. E. LEIGHTON.....714-18 California Bldg.  
Lecturer on Pharmacal Jurisprudence.
- FRED E. LETTICE, M.D.....1018 Brockman Bldg.  
Lecturer on Surgery.
- JEREMIAH B. LILLARD, A.M.....Gardena  
Lecturer in Education.
- FORBES LINDSAY.....6767 Yucca St.  
Special Lecturer in Economics.
- WARREN E. LLOYD, M.L., Ph.D.....906 Central Bldg.  
Lecturer in Philosophy of Law, Spanish and Amer-  
ican Land and Mining Law.
- H. E. MacDONALD, M.D.....714 Baker-Detwiler Bldg.  
Lecturer on Life Insurance Examination.
- A. F. MAISCH, M.D.....600 Auditorium Bldg.  
Lecturer on Medicine.
- HARRY J. McCLEAN, A.B.....Long Beach  
Lecturer in Sociology and Elementary Law.
- ERWIN H. MILLER, B.S.....1051 W. 35th St.  
Lecturer on Food and Drug Adulterations.
- CHARLES E. MILLIKAN, LL.M.....416 Tajo Bldg.  
Lecturer of Practice, and Personal Property and  
Sales.

- REXFORD NEWCOMB, B.S., A.M.....Long Beach  
Lecturer in History of Architecture.
- I. D. NOKES, D.D.S.....Marsh-Strong Bldg.  
Lecturer on Comparative Anatomy and Odontology, Curator of the College Museum.
- J. T. PARKER, JR., D.D.S.....Pasadena, Cal.  
Lecturer in Dental Anatomy and Demonstrator of Operative Technics.
- FRANK L. PLATT, D.D.S.....  
Elkan Gunst Bldg., San Francisco  
Lecturer and Clinical Instructor in Local Anaesthesia.
- PETER C. REMONDINO, M.D.....  
Fifth and Beech Sts., San Diego, Cal.  
Lecturer on History of Medicine and Medical Bibliography.
- O. R. W. ROBINSON, LL.B.....406 International Bank Bldg.  
Lecturer in Acquisition of Title to Public Lands.
- T. W. ROBINSON, A.M.....County Law Library  
Lecturer in Statutory Interpretation.
- L. SCHIFF.....1337 S. Hope St.  
Lecturer on Commercial Pharmacy.
- A. J. SCOTT, JR., M.D.....15th and Figueroa St.  
Lecturer on Pediatrics.
- LEON SHULMAN, M.D.....845 S. Hill St.  
Lecturer on Diseases of the Chest.
- SEWARD A. SIMONS, A.B.....812-814 Security Bldg.  
Lecturer in Insurance Law.
- ROY L. SPENCER, D.D.S.....Merchants National Bank Bldg.  
Lecturer on Extractions and Anaesthesia. Senior Demonstrator of Extractions.
- ROBERT J. TAYLOR, A.M.....4166 Normandie Ave.  
Lecturer in Missions and Comparative Religion.
- JULIUS ZIEGNER-URIBURU, Dr. Jur..922 California Bldg.  
Special Lecturer on Spanish-American Literature.
- MILES GUTHRIE VARIAN, M.D.....  
620-22 Marsh-Strong Bldg.  
Lecturer on Anatomy and Instructor in Gynecology.

- C. A. WAYNE.....Pacific Mutual Bldg.  
Lecturer in Economics.
- HUGH NEAL WELLS, LL.M.....318 Security Bldg.  
Lecturer in Argumentation, Parliamentary Law.
- LUTHER E. WYMAN.....3927 Wisconsin St.  
Special Lecturer in Animal Distribution.

**INSTRUCTORS, ASSISTANTS, AND DEMONSTRATORS**

- EDGAR ALLEN, M.D.....Auditorium Bldg.  
Instructor in Obstetrics.
- C. J. APABLASA, D.D.S.....Hollingsworth Bldg.  
Clinical Instructor in Extractions.
- H. GALE ATWATER, D.D.S.....610 Story Bldg.  
Special Instructor in Root Canal Technique.
- LILLIAN J. BACKSTRAND.....3102 S. Vermont Ave.  
Instructor in Voice Culture.
- FRANK CROWELL BISHOP, M.D.....  
Instructor in Medicine. 1106-7 Marsh-Strong Bldg.
- A. A. BLATHERWICK, M.D.....6100 Moneta Ave.  
Instructor in Obstetrics.
- CHESTER HERBERT BOWERS, A.M., M.D.....  
Instructor in Pediatrics.
- HARRY M. BRANDEL, M.D.....1202 Brockman Bldg.  
Instructor in Pediatrics.
- ERNEST BRAUNTON,  
Instructor in Landscape Gardening.
- EMMA FRANCES BRIDGES,  
Instructor in Applied Arts.
- EARL MANSFIELD BRIGHT,  
Instructor in Violincello.
- V. H. BROWN, D.D.S.....Baker-Detweiler Bldg.  
Demonstrator.
- E. RAY BROWNSON.....218 Bradbury Bldg.  
Demonstrator.
- ESPERANZA CARRILLO, A.M.....1817 Whilley Ave.  
Instructor in Spanish.

- RAY A. CARTER, M.A., M.D.....2711 Central Ave.  
Instructor in Materia Medica.
- HELEN HARRIS CHUTE.....3200 S. Hoover St.  
Instructor in Public School Music.
- MARIE S. CLAKE,  
Instructor in Advanced Art History.
- HORATIO COGSWELL, A.M.  
Instructor in Voice Culture.
- F. K. COLLINS, M.D.....508 Hollingsworth Bldg.  
Instructor in Surgery.
- G. MAURICE CROW, D.D.S.....Wright and Callender Bldg.  
Assistant in Oral Prophylaxis.
- R. S. CUMMINGS, M.D.....1002 Brockman Bldg.  
Instructor in Medicine.
- HERBERT W. CUMMINGS, B.S.....3012 LaSalle Ave.  
Instructor in Physiology.
- W. B. DAKIN, M.D.....403-4 Investment Bldg.  
Instructor in Genito-Urinary Diseases.
- C. S. DELANO.....2610 W. Eighth St.  
Instructor in Guitar and Mandolin.
- MAXWELL M. DIXON, D.D.S.....Story Bldg.  
Demonstrator of Oral Prophylaxis and Pyorrhea  
Alveolaris.
- A. J. DOWNS, M.D.....713 O. T. Johnson Bldg.  
Instructor in Gynecology.
- ROBERT M. DUNSMOOR, M.D.....1104-6 Garland Bldg.  
Instructor in Electrotherapy.
- J. EUGENE FAHY, A.B., M.D.....206 W. 10th St.  
Instructor in Diseases of the Chest.
- PEARL BLANCH FISHER,  
Instructor in French.
- F. B. FITCH, A.B.....1711 W. 56th St.  
Instructor in Chemistry.
- MADELINE FOUCHAUX,  
Instructor in Art History.



- H. GALLAGHER, M.D.....726 Marsh-Strong Bldg.  
Instructor in Medicine.
- PLACIDA GARDNER, A.B., M.D.....  
Assistant in Chemistry. Normal Hill Center, Room 132
- H. SCOTT GERITY, B.S.....330 Consolidated Realty Bldg.  
Instructor in Architecture.
- WILLIAM H. GILBERT, M.D.....  
Instructor in Surgery. 714-725 Baker-Detwiler Bldg.
- WARREN D. GILL, D.D.S.....College of Dentistry Bldg.  
Demonstrator.
- ARTHUR F. GODIN, M.D.....800 Auditorium Bldg.  
Instructor in Medicine.
- RALPH T. GOODWIN, A.B.  
Instructor in Chemistry.
- OSCAR HAMMERCAS,  
Instructor in Still Life.
- ROSS ALLEN HARRIS, M.D.....  
300-301 Broadway Central Bldg.  
Instructor in Ophthalmology.
- EARL HAYDOCK, A.B.....855 W. 35th Place  
Instructor in Rhetoric, Oriental Department.
- L. A. HELLER, D.D.S.....College of Dentistry Bldg.  
Demonstrator.
- ROBERT B. HILL, M.D.....1209 Brockman Bldg.  
Instructor in Medicine.
- LORENA BERNARDINE HILTY,  
Instructor in Art and Design.
- RUFUS ANDREW HOLT, JR., M.D.....California Hospital  
Instructor in Therapeutics.
- G. FLOYD JACKMAN, D.D.S. ....  
Demonstrator. 507 Consolidated Realty Bldg.
- SIMON H. JESBERG, M.D.....807 E. 21st St.  
Instructor in Diseases of Eye, Ear, Nose and Throat.
- C. A. JOHNSON, A.B., M.D.....L. A. Investment Bldg.  
Instructor in Medicine.

- D. ARTHUR JOHNSTON, D.D.S.....Title Insurance Bldg.  
Assistant in Oral Prophylaxis.
- D. DONALD JUDGE,  
Technician in Research Laboratory.
- LOUIS M. KANE, A.B., M.D.....5501 Central Ave.  
Instructor in Medicine.
- MARION KAPPES.....479 Ellis St., Pasadena  
Instructor in Dalcroze-Eurhythmic.
- EVA L. de KERPEZDRON.....1025 W. 78th St.  
Instructor in French.
- WILLIAM B. KERN, M.D.....837 Kingsley Drive  
Instructor in Psychiatry.
- H. C. KING, D.D.S.....Consolidated Realty Bldg.  
Lecturer and Demonstrator of Porcelain Work.
- J. J. KOZLOWSKI.....Blanchard Bldg.  
Instructor in Clarinet.
- JOHN MARK LACEY, M.D.....County Hospital, City  
Instructor in Medicine.
- RICHMOND C. LANE, D.D.S.....Story Bldg.  
Assistant in Oral Surgery.
- MARIAN LEAVER.....501 N. Soto St.  
Instructor in Art and Design.
- G. C. LEISURE.....607 Haas Bldg.  
Assistant in Histology.
- CATHERINE LENNOX.....Van Nuys  
Instructor in Piano.
- WALTER E. LEONARD, B.S., M.D.....Marsh-Strong Bldg.  
Assistant in Physiology.
- J. T. LOUGHAN, D.D.S.....Baker-Detwiler Bldg.  
Assistant in Oral Prophylaxis.
- AUGUSTA LUBER, M.D.....1002 Brockman Bldg.  
Assistant in Bacteriology.
- A. W. LUFKIN, D.D.S.....  
Demonstrator; Assistant in Materia Medica and  
Therapeutics.
- THOMAS LYNCH, D.D.S.....California Bldg.  
Assistant in Oral Prophylaxis.

- RICHARD C. MacCLOSKEY, B.S., M.D.....  
926 Marsh-Strong Bldg.  
Instructor in Diseases of the Chest.
- S. S. McMILLEN, D.D.S.....1115 Baker-Detweiler Bldg.  
Demonstrator.
- CLOYD HECK MARVIN, A.M.....1076 W. 35th St.  
Instructor in Economics.
- JESSE RAY MILLER, A.B.....3474 University Ave.  
Instructor in Journalism.
- T. L. MILLHAM, D.D.S.....College of Dentistry Bldg.  
Demonstrator.
- SINGLETON R. MITCHELL, M.S.....Redondo Beach  
Instructor in Chemistry.
- H. L. MOFFATT.....1018 Brockman Bldg.  
Demonstrator of Anatomy.
- DWIGHT S. MOORE, M.D.....1106-7 Marsh-Strong Bldg.  
Instructor in Medicine.
- WAYLAND A. MORRISON, A.B., M.D.....  
Instructor in Surgery. 321 Kerckhoff Bldg.
- ARTHUR MORSE,  
Assistant in Chemistry.
- CHARLES F. NELSON, S.B., M.D.....  
Instructor in Surgery. 732 L. A. Investment Bldg.
- G. E. PATRIC, M.D.....821 Baker-Detwiler Bldg.  
Instructor in Diseases of the Chest.
- ISABELLE PATTERSON,  
Instructor in Mythology.
- ADRIAN B. PERKEY, M.D.....917 Brockman Bldg.  
Instructor in Medicine.
- ARTHUR M. PERRY.....1042 W. 41st St.  
Instructor in Violin.
- EDWIN F. RATHJEN, A.M., Ph.D.....926 W. 35th St.  
Instructor in Chemistry.
- L. LORE RIGGIN, Ph.B., M.D.....  
42 N. Raymond Ave., Pasadena  
Instructor in Surgery.

- J. MARGARET ROBERTS, M.D.....1229 W. 23rd St.  
Instructor in Diseases of the Chest.
- MRS. NORMA ROCKHOLD ROBBINS.....  
Instructor in Voice Culture. Prince Rupert Apartments
- HERBERT AUGUSTUS ROSENKRANZ, A.B., M.D.....  
1024 Story Bldg.  
Instructor in Genito-Urinary Diseases.
- IOHANE F. SAKAIZAWA.....1120 Georgia St.  
Instructor in the Japanese Language.
- IRVIN KARSNER SEARLE, B.S., A.M.....  
5306 Seventh Ave., Mesa Drive  
Instructor in Chemistry.
- PAUL K. SELLEW, M.D.....128 N. Ardmore St.  
Instructor in Pathology.
- C. A. SMALLEY, M.D.....505-506 Wright & Callender Bldg.  
Instructor in Medicine.
- WILLIAM T. SMITH, M.E.....1018 W. Eighth St.  
Instructor in Metallurgy.
- PAUL S. SPRUNCK,  
Instructor in Anatomy.
- F. G. STALEY, D.D.S.....College of Dentistry Bldg.  
Demonstrator.
- H. E. STRAUB, D.D.S.....Story Bldg.  
Assistant in Oral Surgery.
- FORREST C. SWEARINGEN, S.B., M.D.....  
Instructor in Therapeutics. 507-8 Auditorium Bldg.
- FRANK GEORGE TAPNER,  
Instructor in Metal and Jewelry.
- LYMAN ELANSON THAYER, M.D.....  
Instructor in Obstetrics. 800 L. A. Investment Bldg.
- WELCOME A. TILROE, A.B.....1017 W. 34th St.  
Instructor in Latin.
- AIME B. TITUS.....Athletic Club  
Instructor in Art and Design.
- C. ADELAIDE TROWBRIDGE.....Fowler Apts.  
Instructor in Piano.
- E. C. UNDERHILL, D.D.S.....College of Dentistry Bldg.  
Demonstrator.

FRANK R. WEBB, M.D.....516 E. Washington St.  
Demonstrator of Anatomy.

AVA CLARISSA WELLS.....Santa Ana  
Instructor in Art and Design.

CLARENCE E. WORTH, D.D.S...Consolidated Realty Bldg.  
Demonstrator of Porcelain Work.

CHARLES STEPHEN YOUNG, M.D.....  
Instructor in Surgery. 627 Consolidated Realty Bldg.

### **Judges of the Practice Court**

Department 1—Kemper B. Campbell, LL.M., Presiding  
Judge.

Department 2—Elmer R. McDowell, LL.M.

Department 3—Walter Bowers, LL.M.

Department 4—James S. McKnight, LL.B.

Department 5—A. A. Kidder, Jr., LL.B.

Department 6—A. L. Bartlett, LL.B.

Department 7—R. W. Heffelfinger, LL.B.

Department 8—Ewald Selph, LL.B.

Department 9—O. R. W. Robinson, LL.B.

Department 10—C. L. Bagley, LL.B.

Department 11—Clair Enyeart, LL.M.

Department 12—Ralph A. Chase, LL.B.

Department 13—John B. Haas, LL.B.

### **Extra Session Judges**

W. S. Allen, A.B.

Frank P. Doherty, LL.B.

J. Karl Lobdell, LL.B.

Richard J. O. Culver, LL.B.

James D. Taggart, A.B., LL.B.

Thomas P. White, LL.B.

Hugh N. Wells, LL.M.

### **Appeals**

Gavin W. Craig (Judge of Superior Court, Los Angeles  
County).

Frederick W. Houser (Judge of Superior Court, Los Angeles  
County).



**OFFICE ASSISTANTS AND OTHERS**

GEORGIANA EMILY QUICK,  
Storekeeper, Department of Chemistry.

ANNA SHEPARD,  
Secretary to the President

MABEL E. RUSSELL, A.B.  
Assistant Registrar

LOTTIE F. HOUGH,  
Assistant in Office of Registrar

SARAH ETHYL PROCTOR,  
Assistant in Office of Treasurer

HENRY W. BRUCE,  
Assistant in Office of Treasurer.

ROBERT A. HONNER,  
Assistant in Office of Treasurer

MATHILDE OCTAVIE WACK,  
Library Assistant

EDITH BERNICE LOVELAND,  
Library Assistant

RUTH ESTHER BROWNE,  
Library Assistant

BERNHARD OERTLEY,  
Secretary of the Y. M. C. A.

EDNA SEDWEEK,  
Secretary of the Y. W. C. A.

VIRGINIA RAMSEY,  
Secretary College of Fine Arts.

PEARL ALICE MACLOSKEY  
Secretary to the Dean, College of Music.

# THE COLLEGE OF LIBERAL ARTS

## ORGANIZATION

The College of Liberal Arts is organized into Undergraduate Departments and a Graduate Department.

Four year major courses, leading to the degree of Bachelor of Arts, are offered in the following Undergraduate Departments: Biology, Chemistry, Economics, Education, English, French, German, Greek, History, Journalism, Latin, Mathematics, Oriental Studies, Philosophy, Physics, Political Science, Psychology, Religious Education, Sociology and Spanish.

Four year courses, leading to the degree of Bachelor of Science in Engineering, are offered in Architecture, Civil Engineering and Electrical Engineering.

The Departments of Agriculture, Chemical Engineering and Mining Engineering at present offer only the first two years of a four year course.

Elective courses are also offered in the Departments of Art and Design, Drawing, Geology, Italian, Music, Oratory, and Physical Education.

The Graduate Department offers courses leading to the degree of Master of Arts in Biology, Chemistry, Economics, Education, English, French, German, Greek, History, Latin, Mathematics, Philosophy, Physics, Political Science, Psychology, Religious Education and Sociology. It also offers courses leading to the University Recommendation for the High School Teacher's Certificate in Biology, Chemistry, Economics, Education, English, French, German, Greek, History, Latin, Mathematics, Physics, Spanish and Sociology.

## THE UNDERGRADUATE COURSES

### CONDITIONS OF ADMISSION

There are three classes of admissions to the undergraduate courses: (a) admission to Freshman standing; (b) admission to advanced standing; and (c) admission as special student.

**a. Candidates for admission to Freshman standing** must be at least sixteen years of age and must present evidence of good moral character. They must also give, either by certificate or by examination as hereafter described, evidence of preparation in fifteen units of preparatory subjects selected

from the general list of subjects described on the following pages. For admission to the course leading to the degree of Bachelor of Arts these fifteen units must be made up as follows:

English .....	2 units*
A Foreign Language.....	2
Laboratory Science .....	1
Algebra and Plane Geometry.....	2
United States History and Civics.....	1
Electives .....	7

The laboratory science may be Botany, Zoology, Physiology, Physics, or Chemistry.

For admission to the courses in Engineering the fifteen units must include the following:

English .....	2 units
A Modern Language.....	2
Chemistry .....	1
Physics .....	1
Elementary Algebra .....	1
Advanced Algebra .....	1
Plane Geometry .....	1
Trigonometry and Solid Geometry.....	1
United States History and Civics.....	1
Freehand Drawing .....	1
Mechanical Drawing .....	1
Electives .....	2

### Complete List of Admission Subjects

Eng. Grammar and Comp..... $\frac{1}{2}$	History, United States..... $\frac{1}{2}$
Eng. Lit., Elementary..... 1	Civics .....
Eng. Lit., Advanced..... 1	Social Science .....
Eng. Lit., History of..... $\frac{1}{2}$	Algebra, Elementary .....
Latin, Elementary .....	Algebra, Advanced .....
Latin, Advanced .....	Plane Geometry .....
Greek, Elementary .....	Plane Trigonometry .....
Greek, Advanced .....	Solid Geometry .....
German, Elementary .....	Botany .....
German, Advanced .....	Zoology .....
French, Elementary .....	Chemistry .....
French, Advanced .....	Physics .....
Spanish, Elementary .....	Physiology .....
Spanish, Advanced .....	Physical Geography .....
History, Grecian and Roman..... 1	General Science .....
History, Medieval and Modern..... 1	Freehand Drawing .....
History, English .....	Mechanical Drawing .....
	Vocational Subjects .....

\*The term "unit" is here used to denote a preparatory subject studied through one school year with five class exercises (or the equivalent) per week.

**Admission by Certificate.** The candidate, having completed a regular course in the University High School of this University or in an accredited high school, is admitted to the Freshman class without examination, on presenting a certificate signed by the principal. Unconditional credit is given only for entrance subjects in which the candidate is specifically recommended.

The Faculty reserves the right, however, to require an examination upon any or all of the studies set for entrance, whenever there is doubt that the preparation has been sufficient. To increase the probability of entrance without examination, credentials should be presented as early as possible before registration. Blanks of application for admission may be obtained by applying to the Registrar.

**Admission by Examination.** Entrance examinations in all the required admission subjects not covered by certificate from an accredited school are held in September.

**b. Candidates for admission with Advanced Standing** are of two types:

1. Students from other institutions of recognized collegiate rank, including Junior Colleges with well established courses, may be admitted to such standing and upon such terms as the Faculty may deem equitable. Every such candidate is required to present a catalog of the institution in which he has studied; a full statement, duly certified, of the subjects he has there completed and of the subjects there presented for entrance; and a letter of honorable dismissal. The Faculty reserves the right to determine, after a test of at least one semester, the amount of credit that the applicant may receive.

Students from accredited Junior Colleges may receive tentative advance credit up to a maximum of 68 units.

2. Graduates of State Normal Schools who are also graduates of accredited high schools, may receive tentative advanced credit amounting to from 30 to 45 units.

**c. Candidates for admission as Special Students** must be persons of mature age who desire to take up special work in one department, or in one subject with its related branches. Such special students are not candidates for a degree; but they may become candidates by satisfying the entrance requirements for a regular course. Such students come under the same regulations as regular undergraduates, and forfeit their privileges by failure to maintain a good standing.

## DESCRIPTION OF ADMISSION SUBJECTS

1. **English Grammar and Composition.** It is expected that the candidate for admission will have acquired during his high school course a command of correct and clear English, spoken and written. As a result of classroom study of grammar and rhetoric, in addition to much practice in actual writing, he must be prepared to answer specific questions upon



the practical essentials of those subjects, such as the relations of the various parts of the sentence to each other, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors. He must be able to write an essay developing a theme through several paragraphs, free from marked deficiencies in spelling, punctuation, sentence-structure, and paragraphing, and indicative of ability to think consecutively on a simple subject. A preliminary examination is given to all students before enrolling them permanently in the required course in Freshman English composition, and each student found deficient in such preparation is required to register in the Sub-Freshman English courses 1a or 1b, or both, for which no credit is given. In cases of marked deficiency the enrollment of the student in the class in Freshman English is cancelled. No grade is given in Freshman English under any circumstances until all deficiencies are made up. (1½ units.)

2. **English Literature.** The standard maintained is that of the National College Entrance Examination Board. The division of units is as indicated below.

(a) **ELEMENTARY ENGLISH LITERATURE.**—Such a reading of the following works (or their equivalents), grouped as indicated, as shall give the student the habit of intelligently reading a book as an artistic unit. **At least two selections are to be made from each of the following five groups, except as otherwise provided under Group 1. Each selection must include all the work or works included between two dashes. (1 unit.)**

Group 1. Classics in translation. The "Old Testament," comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the Books of Ruth and Esther.—The "Odyssey" (with the omission, if desired, of Books i, iii, iv, v, xv, xvi, adn xvii).—The "Iliad" (with the omission, if desired, of Books xi, xiii, xiv, xv, xvii, and xxi).—The "Aeneid." (For any selection from this group a selection from any other group may be substituted.)

Group 2. Shakespeare. "A Midsummer-Night's Dream."—"The Merchant of Venice."—"As You Like It."—"Twelfth Night."—"The Tempest."—"Romeo and Juliet."—"King John."—"Richard II."—"Richard III."—"Henry IV."—"Coriolanus."—"Julius Caesar."—"Macbeth."—"Hamlet." (The last three if not chosen for study under (b).)

Group 3. Prose Fiction. Malory's "Morte d'Arthur" (about 100 pages).—Bunyan's "Pilgrim's Progress."—Swift's "Gulliver's Travels" (the voyages to Lilliput and to Brobdingnag).—Defoe's "Robinson Crusoe," Part I.—Goldsmith's "Vicar of Wakefield."—Frances Burney's "Evelina."—Any of Scott's novels.—Any of Jane Austen's novels.—Miss Edgeworth's "Castle Rackrent" or "The Absentee."—Any of Dickens' novels.—Any of Thackeray's novels.—Any of George Eliot's novels.—Mrs. Gaskell's "Cranford."—Kingsley's "Westward Ho!" or "Hereward, the Wake."—Reade's "The Cloister and the Hearth."—Blackmore's "Lorna Doone."—Hughes' "Tom Brown's Schooldays."—Stevenson's "Treasure Island" or "Kidnapped" or "The Master of Ballantrae."—Any of Cooper's novels.—Selected tales from Poe.—Hawthorne's "The House of the Seven Gables" or "Twice Told Tales" or "Mosses from an Old Manse."—A collection of short stories from various standard authors.

Group 4. Essays, Biography, etc. Addison and Steele's "Sir Roger de Coverly Papers" or selections from the "Tatler" and "Spectator" (about 200 pages).—Selections from Boswell's "Life of Johnson" (about 200 pages).—Franklin's "Autobiography."—Irving's "Sketch Book" (about 200 pages) or "The Life of Goldsmith."—Southey's "Life of Nelson."—Lamb's "Essays of Elia" (about 100 pages).—Lockhart's "Life of Scott" (about 200 pages).—Thackeray's "English Humorists" (lectures on Swift, Addison, and Steele).—Macaulay's "Essays" (any one of those on Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederick the Great, or Madame d'Arbly).—Travelyan's "Life of Macaulay" (about 200 pages).—Ruskin's "Sesame and Lilies" or "Selections" (150 pages).—Dana's "Two Years Before the Mast."—Selections from Lincoln (two Inaugurals,



Speeches in Independence Hall and at Gettysburg, the Last Public Address, the letter to Horace Greeley, and a brief memoir or estimate of Lincoln).—Parkman's "The Oregon Trail."—Thoreau's "Walden."—Selected essays from Lowell (about 150 pages).—Holmes' "Autocrat of the Breakfast Table."—Stevenson's "An Inland Voyage" and "Travels with a Donkey."—Huxley's "Autobiography" and selections from "Lay Sermons" (including "Improving Natural Knowledge," "A Liberal Education," and "A Piece of Chalk").—A collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, and later writers.—A collection of letters by various standard writers.

Group 5. Poetry. Palgrave's "Golden Treasury (First Series)," Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns.—Palgrave's "Golden Treasury (First Series)," Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under (b)).—Goldsmith's "The Traveller" and "The Deserted Village."—Pope's "The Rape of the Lock."—A collection of English and Scottish ballads (as the Robin Hood ballads, "The Battle of Othterburn," "King Estmere," "Young Beichan," "Bewick and Grahame," "Sir Patrick Spens," etc.).—Coleridge's "The Ancient Mariner," "Christabel," and "Kubla Khan."—Byron's "Childe Harold," canto III or IV, and "The Prisoner of Chillon."—Scott's "The Lady of the Lake" or "Marmion."—Macaulay's "Lays of Ancient Rome," "The Battle of Naseby," "The Armada," and "Ivry."—Tennyson's "The Princess" or "Gareth and Lynette," "Lancelot and Elaine," and "The Passing of Arthur."—Browning's "Cavalier Tunes," "The Lost Leader," "How They Brought the Good News from Ghent to Aix," "Home Thoughts from Abroad," "Home Thoughts from the Sea," "An Incident of the French Camp," "Herve Riel," "Pheidippides," "My Last Duchess," "Up at a Villa—Down in the City," "The Italian in England," "The Patriot," "The Pied Piper," "De Gustibus"—and "The Forsaken Merchant."—Selections from "American Poetry," with special attention to Poe, Lowell, Longfellow, and Whittier.

(b) ADVANCED ENGLISH LITERATURE.—Such a study of the following works, grouped as indicated, as shall enable the student to answer questions upon their content, form and structure; upon the meanings of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style; and upon their relations to their author's life, other works, and literary environment. One selection is to be made from each of the following groups. (1 unit.)

Group 1. Drama. Shakespeare's "Julius Caesar."—"Macbeth."—"Hamlet."

Group 2. Poetry. Milton's "L'Allegro," "Il Penseroso," and either "Comus" or "Lycidas."—Tennyson's "The Coming of Arthur," "The Holy Grail," and "The Passing of Arthur."—The selections from Wordsworth, Keats and Shelley, in Book IV of Palgrave's "Golden Treasury (First Series)."

Group 3. Oratory. Burke's "Speech on Conciliation with America."—Macaulay's "Speech on Copyright" and Lincoln's "Speech at Cooper Union."—Washington's "First Bunker Hill Oration."

Group 4. Essays. Carlyle's "Essay on Burns" (with a selection from Burns' "Poems").—Macaulay's "Life of Johnson."—Emerson's "Essay on Manners."

(c) HISTORY OF ENGLISH LITERATURE.—A brief outline of the history of English literature, emphasizing the salient characteristics of the successive literary periods from the "Beowulf" to the present day, and associating with each its chief books and authors. (½ unit.)

3. Elementary Latin. The essential requirements in Elementary Latin are an accurate pronunciation, a thorough knowledge of forms and the simpler principles of syntax, the ability to translate easy prose at sight, and the ability to write simple sentences in Latin. These attainments may be secured by the thorough mastery of an elementary text-book, the read-

ing of four books of Caesar's Gallic War, or an equivalent amount from selected authors including Caesar, and by exercises in written prose composition. The examination in composition in 1916-1917 will be based on the second book of Caesar's Gallic War. 2 units.)

4. **Advanced Latin.** To meet the requirements in Advanced Latin a student must be able to translate portions of Cicero's orations and Virgil's Aeneid, to show a familiarity with the principles of the Latin hexameter, and to translate a passage of connected English prose based on Cicero. These attainments may be secured by the careful study of six of Cicero's orations and six books of the Aeneid, together with a thorough drill in oral and written composition. The examination in composition in 1916-1917 will be based on the Third Oration Against Catiline. (2 units.)

5. **Greek.** (a) Elementary Greek. A mastery of forms and the elementary principles of syntax. Anabasis, Book I, Chap. 1-4. (1 unit.)

(b) Second year's work. Anabasis, Books I-IV, or selections equivalent in amount. Prose composition based on the Anabasis, one exercise per week for a year. (1 unit.)

(c) Third year's work. Homer's Iliad, Books I-VI. (1 unit.)

6. **Advanced Greek.** Third year's work: Three additional books of the "Iliad," three of the "Odyssey," and either Plato's "Apology" and "Crito," or Herodotos, books VI-VII-VIII, or the equivalent from some other author. (1 unit.)

7. **German.** A knowledge of the inflections of the articles, nouns, adjectives, pronouns, weak verbs, and the usual strong verbs; familiarity with the use of the modal auxiliaries and the common prepositions, with the simpler uses of the subjunctive, and with the principles governing order of words; and the ability to read and translate such stories and plays as Storm's "Immensee" and Benedix's "Der Prozess," to translate easy English into German, to translate at hearing, and to pronounce correctly. (2 units.)

8. **Advanced German.** Greater fluency in reading and translating German; the ability to re-tell an episode or short story and to explain words and phrases in German; familiarity with the uses of the subjunctive mode, especially in indirect discourse, and with the formations of the passive voice, and a general strengthening of the knowledge of grammatical forms. This knowledge may be attained by reading and translating from 500 to 600 pages of German, with much viva voce practice in the form of questions on the text and explanations in German. Two lessons a week should be devoted to prose composition and oral practice in grammar and vocabulary. (2 units.)

9. **French.** A knowledge of the essentials of grammar, including the inflections of nouns, adjectives, pronouns, and regular and common irregular verbs; familiarity with the use of the personal pronouns and with the elementary rules of syntax; and the ability to pronounce accurately, to read smoothly, to translate modern stories and plays, such as About's "Le Roi des Montagnes" and Labiche and Martin's "Le Voyage de M. Perrichon"; to translate at hearing and at sight; and to translate easy English into French. (2 units.)

10. **Advanced French.** A thorough knowledge of grammar. The reading from nineteenth century authors of 500 to 700 pages beyond the work of the first two years. Advanced composition with particular reference to idiom. The ability to understand and to express one's self in ordinary French. (2 units.)

11. **Spanish.** The essentials of Spanish Grammar. Readings from such a text as Hill's "Spanish Tales for Beginners," and one or more novels. Simple conversation in Spanish. Special importance is attached to a knowledge of Spanish verbs. (2 units.)

12. **Advanced Spanish.** Two years of work, including the careful reading of short stories and such novels as "Marianela," "El Capitán Veneno," "Gil Blas," and "Pepita Jiménez." Crawford's "Composition" and Ramsey's "Grammar. Conversation. (2 units.)

13. **Grecian and Roman History.** Myers' "Greek and Roman History"; Wolfson's "Essentials in Ancient History"; West's "Ancient History"; or an equivalent. Class room discussions, not book work, and reports. (1 unit.)

14. **Medieval and Modern History.** Myers' "Mediaeval and Modern History"; Robinson's "History of Western Europe"; or an equivalent. Recitations and reference notebook work. (1 unit.)

15. **English History.** Coman and Kendall, or Cheyney's "History of England," or an equivalent. Recitations, notebook work, and reports. (1 unit.)

16. **United States History.** Channing's "Student's History of the United States"; Muzzey's "American History"; or an equivalent. Recitations, notebook work, and reports. ( $\frac{1}{2}$  unit.)

17. **Civil Government.** Ashley's "American Government," or an equivalent. Reference work and class room discussion. The keeping of notebooks is desirable. ( $\frac{1}{2}$  unit.)

18. **Elementary Algebra.** This should include the following subjects: The four fundamental operations with emphasis placed on the type-forms in multiplication and division; factoring, the highest common factor, and lowest common multiple; fractions and fractional equations; simultaneous equations of the first degree; the binomial theorem for a positive integral exponent; evolution; the theory of exponents; radicals; quadratic equations; and the solution of problems involving the various classes of equations. Emphasis should be placed on factoring and on the solutions of equations. (1 unit.)

19. **Advanced Algebra.** This should include the following subjects: Mathematical induction; the proof and the use of the remainder and the factor theorems; evolution, including the extraction of any root of algebraic polynomials, and also of arithmetic numbers; the theory of exponents; complex numbers; radicals and irrational equations; the theory of quadratic equations; simultaneous quadratics; inequalities; ratio, proportion and variation; arithmetic, geometric, and harmonic series; logarithms; permutations and combinations; limits and infinite series; the binomial theorem for any exponent; functionality and graphic representation; the theory of equations. Emphasis should be placed on the solution of equations by factoring, and on the demonstration of laws and principles. (1 unit.)

20. **Plane Geometry.** This includes the usual theorems and problems of elementary plane geometry. An important part of the work should be the solution of original exercises, including problems in mensuration. (1 unit.)

21. **Trigonometry and Solid Geometry.** The development of the general formulae of elementary plane trigonometry; the theory of logarithms and the use of logarithmic tables; and the numerical solution of plane triangles, and of simple problems in heights and distance. The fundamental propositions of solid geometry and especially those of spherical geometry. (1 unit.)

22. **Chemistry.** Laboratory and text-book work for one school year, such as outlined in McPherson and Henderson's, Brownlee's, or Morgan's elementary texts. At least four hours per week throughout the year of actual laboratory practice is required to complete the amount of laboratory work desired. (1 unit.)

23. **Physics.** The equivalent of one year's work, including both laboratory and text-book work. Accurate notes of the laboratory work should be kept. Millikan and Gale, "First Course in Physics," or Carhart's and

Chute's "High School Physics" will serve to indicate the amount of textbook study required. (1 unit.)

24. **Botany.** A study of types of plant groups, both in the laboratory and in the field. Drawings and notes made directly from the specimens must be submitted as evidence of the character of the work done. A full year's work. (1 unit.)

25. **Zoology.** One year's work on the structure, relationship, and habits of animals. Laboratory notebooks with drawings will be required. (1 unit.)

26. **Physiology.** An equivalent of Martin's "Human Body, Shorter Course." (1 unit.)

27. **Physical Geography.** The study of one of the leading text-books, supplemented by at least forty exercises in individual laboratory work. (1 unit.)

28. **Freehand Drawing.** The study of light and shade and perspective, by drawing and shading with the pencil from geometric and simple life objects. ( $\frac{1}{2}$  to 1 unit.)

29. **Mechanical Drawing.** The use of drawing instruments in line work, lettering, geometrical problems, simple projection and working drawings. ( $\frac{1}{2}$  to 1 unit.)

30. **General Science.** The subject should be treated from the general scientific standpoint rather than from the standpoints of the several subdivisions. The course should deal with the elementary principles involved in gardening, sanitation, household operations, machinery, and various natural phenomena. (1 unit.)

31. **Social Science** (1 unit), which may be made up from the following:

(a) **Commercial and Industrial History.** This subject should include the development of the commercial and industrial activities of the western world from the time of the Roman Empire to the present time. The course should be essentially a history of Western Europe from the economic standpoint. ( $\frac{1}{2}$  or 1 unit.)

(b) **Economic Geography.** This course should comprise a study of countries, products, and trade routes in relation to the economic interests of man. ( $\frac{1}{2}$  unit.)

(c) **Economics.** A knowledge of the fundamental principles of economic science, including such subjects as the division of labor, the factors of production, demand and supply, value and prices, and international trade. A good text should form the basis of the course. ( $\frac{1}{2}$  unit.)

(d) **Sociology.** A systematic study of the underlying features of social progress, with constant reference to actual conditions in contemporaneous society. A good recent text should be used, carefully selected readings assigned, and student exercises required. ( $\frac{1}{2}$  unit.)

(e) **Commercial Law.** This course should include a study of the rights and privileges and corresponding duties and obligations of men in commercial pursuits. The common law and statute law in ordinary business transactions should be studied.

32. **Vocational Subjects.** One, two, or three units of well established courses of vocational work in accredited high schools may be presented among the electives.

**Note**—In the case of students graduated from a recommended high school, credit may be allowed for such subjects, not designated in this list, as are recommended by the principal and approved by the University faculty. Candidates who offer subjects in Science may be required to present their note-books.



## THE UNDERGRADUATE ARTS COURSES

The College offers regular undergraduate courses with major subjects as follows: Biology (Zoology or Botany), Chemistry, Economics, Education, English, French, German, Greek, History, Journalism, Latin, Mathematics, Oriental Studies, Philosophy, Physics, Political Science, Psychology, Religious Education, Sociology, and Spanish. Each of these courses is designed to give a liberal education, extends through four years, and leads to the degree of Bachelor of Arts.

Each course requires completion of one hundred and twenty units of college work, exclusive of the requirements in Physical Education. In this connection a "unit" means one exercise a week throughout a semester, each exercise to represent, for the average student, one hour of recitation or lecture and two hours of preparation or of subsequent reading per week, or an equivalent amount of work in laboratory courses.

Lower Division courses are usually to be taken in the Freshman and Sophomore years and Upper Division courses in the Junior and Senior years. Sixteen units per semester for the Lower Division and fourteen for the Upper Division is considered full work.

Before the beginning of the Sophomore year every student shall make choice of the department in which he desires to pursue his major course. His work will thereafter be under the direction of the professor who is at the head of that department. It is advisable that this choice be made as soon after matriculation as possible, so that the entire work of the student may be properly planned.

### Requirements for Degree of Bachelor of Arts

The following work must be completed in candidacy for the degree of Bachelor of Arts:

**A. The General College Requirements.** To be completed by the end of the Sophomore year.

**English 1.** One year; six units.

**Science.** One year; eight or ten units. The science may be Chemistry, Physics, Botany, or Zoology.

**Foreign Language.** Two years; sixteen units. The language may be Latin, Greek, German, French, Spanish, or Italian. If the language offered for entrance is continued, the requirement is reduced to six units.

**Psychology.** One year; six units.

**History, Economics, or Religious Education.** Eight units to be taken in any two of these subjects.

**Physical Education.** Two years; four units.



**B. The required subjects in the major department.**

**C. A minor subject, approved by the major department.**

**D. Elective courses,** to be selected by the student with the advice of his major professor, sufficient to complete the required 120 units.

**E.** It is also required that thirty-six of the units completed during the Junior and Senior years shall be in Upper Division courses.

### **Options in the Professional Schools**

**Law.**—When 94 units, including all the general college requirements and a minimum of 24 units in the major department, have been completed in the College of Liberal Arts, and of these not less than 32 have been taken in the College of Liberal Arts of this University, the student may take the studies of the first year of the College of Law, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years in that college. Special consideration should be given to the following subjects: English (including Expression); Latin (at least two years if not covered by entrance credits); History (English and American), with special reference to Institutional and Constitutional; Logic; Philosophy; Economics and Sociology; and Political Science. For a description of the recommended pre-legal course see under College of Law.

**Medicine.**—When 94 units, including all the general college requirements and a minimum of 24 units in the major department, have been completed in the College of Liberal Arts, a student may take the first year in the College of Physicians and Surgeons, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years' work in that college. To this end the required subjects in the College of Liberal Arts are the same as those for the regular candidate for the degree of A.B., except that Biology should be the elected major and German or French the elected language (Latin being offered for entrance), and that in Science there is a requirement of one year **each** of Physics and Chemistry.

### **Pre-medical Course**

Two years of work in the College of Liberal Arts or other approved institution are now required for entrance to the

College of Physicians and Surgeons. This must be preceded by a regular four-year High School course. There must be included two years each of Chemistry, Physics, Biology and French or German. Half of each of these subjects are normally taken in the High School course. For detailed description see College of Physicians and Surgeons.

### **The Courses of Engineering**

The four-year courses in the Department of Architecture; Civil Engineering and Electrical Engineering and the two-year course in the Department of Mining and Chemical Engineering are more exclusively technical than the Arts courses just described. The courses therefore differ from the foregoing in their regard to the general college requirements, in their greater rigidity of outline, and in the increased number of hours assigned to the work of the various years. These technical courses lead to the degree of Bachelor of Science in Engineering. For a description of the work, together with the full outlines of the required courses, see articles on **Engineering Courses** as indicated in the index.

## **CLASSIFICATION OF STUDENTS**

Students will be classed as Sophomores who have no entrance conditions, and who have completed the first-year work in Physical Education and thirty-two semester units of work, including the first year of the General College Requirements, i. e., English I, a Science, one year's work in a Foreign Language, History or Economics.

Students will be admitted to the Upper Division and classed as Juniors who have completed sixty-four semester units of work in addition to the full requirements in Physical Education, and including all of the General College Requirements.

Upper Division students will be classed as Seniors who have completed ninety-two semester units of work.

Students in the Engineering Courses will be classified as Sophomores, Juniors or Seniors upon the basis of the completion of at least nine-tenths of the work outlined for the various years.

## **MATRICULATION AND REGISTRATION**

On or before the appointed registration days in September and February, each student must register at the Registrar's office, and must have entered upon a study card the subjects desired for the semester.

Lower division students may register for as many as eighteen units and upper division students for as many as sixteen units. Upon petition to the Credentials Committee special permission may in certain cases be granted to carry excess units.

No student may change his registration without presenting his reason on official blanks to the Registrar and securing his approval.

Students will not be given credit for work that is not recorded in the Registrar's office.

In the choice of subjects, all work necessary to remove conditions must be provided for first; and required subjects must take precedence of elective subjects.

In order that students may have careful consideration in selecting the subjects to be taken, the Registrar's office is kept open throughout the year. Students are urged therefore to present their credentials and complete their registration prior to the appointed registration days.

## **ATTENDANCE, EXAMINATION AND GRADES**

**Attendance** upon all class and laboratory exercises indicated upon the enrollment card is required. Absences are counted from the day on which instruction begins. All absences are reported to the office at the end of each semester. If the number of absences exceed one in a one-unit course, three in a two-unit course, five in a three-unit course, seven in a four-unit course, or nine in a five-unit course, the mark "Con." will appear in place of a grade and can be removed only by special arrangements with the instructor.

**Regular** examinations are held at the close of each semester in the studies that have been pursued in the different classes. After the examination the parent or guardian of every student receives from the office a report giving the student's standing in each subject for the semester.

**Scholarship** Grades are indicated by letters, as follows:

- A. Work of marked excellence.
- B. Thoroughly satisfactory work
- C. Passing work.
- Con. Conditional, work not up to passing grade.
- R. Incomplete, indicating that while the work done is of passing grade, certain portions remain uncompleted.
- F. Failure. Credit can be given only upon repetition of the course.

A and B are termed "recommended grades," and pass the student in any subject. C is also a passing grade in any subject but only a limited proportion of C grades may be counted toward graduation. See "graduation." If the student is reported "conditioned" or "incomplete," such delinquency must be made up in such manner as the instructor may determine, within one year from the date thereof. If the delinquency be not thus made up, the student may be required to take the subject again with a class, before credit in said subject may be obtained.

**Probation.** Failure to pass in at least two-thirds of the units carried will result in the student being placed on probation the following semester. A second such failure, while on probation will result in dismissal. While on probation the student may not take part in any intercollegiate contest nor represent the University in any public manner, either as an individual or as a member of any organization.

**For special examinations** a fee of two dollars is charged.\* Such are:

1. Examinations for college entrance not taken at the regular times.
2. Examinations for college credit on work for which special credentials can not be supplied.
3. Examinations to make up mid-semester or final examinations, whether the delinquency is caused by failure to pass or by absence.

## GRADUATION

**Requirements.** Upon the completion of one hundred and twenty units (exclusive of those in Physical Education) of the courses organized as above described, the student may be granted the degree of Bachelor of Arts, **provided**, that at least one academic year shall have been spent in residence in this college and that three-fourths of the total number of units presented for graduation, exclusive of those in Physical Education, and at least four-fifths of the units in the major department is of recommended grade.

---

\*Instructors are authorized to give such examinations only on presentation of the Treasurer's receipt for the fee in question.



The degree of Bachelor of Science in Engineering will be given upon the completion of the required courses in Engineering, provided that at least one academic year shall have been spent in residence in this college and that three-fourths of the total number of units completed are of recommended grade.

**Graduation with Honors.**—Honor points are given as follows: For each unit of A grade, five points; for each unit of B grade, 4 points. A student who has completed 120 units of work and received 590 honor points may be graduated **magna cum laude**.

A student who has completed 120 units of work and received 560 honor points may be graduated **cum laude**.

In case more than 120 units are completed the number of points necessary for honors will be increased proportionately.

Engineering students may be graduated "with distinction" under rules established by the Committee on Engineering.

Under no circumstances will either of these honors be conferred upon a student who has spent less than two full years in this University.

## THE GRADUATE DEPARTMENT

### ORGANIZATION

The graduate Department of the College of Liberal Arts of the University of Southern California was formally organized during the year 1910-11. General oversight of the Department is intrusted to the Graduate Council, which is a standing committee appointed from the faculty by the President of the University. The administrative officers of the Graduate Council are Thomas B. Stowell, Chairman; Rockwell D. Hunt, Secretary, and J. H. Montgomery, Registrar, who may be called upon for information and advice.

### PURPOSE

It is the purpose of the Graduate Department: (1) To give due prominence to graduate courses of instruction offered by the University; (2) to insure systematic and efficient administration of this advanced work; (3) to provide separate instruction for graduate and upper division students.



## THE GRADUATE COUNCIL

The Graduate Council consists of the following members of the Faculty:

GEORGE FINLEY BOVARD, D.D., LL.D.,  
President of the University.

THOMAS B. STOWELL, Ph.D., LL.D., Chairman.

ROCKWELL D. HUNT, Ph.D., Secretary.

J. H. MONTGOMERY, M.S., E.E., Registrar.

PAUL ARNOLD, Ph.M.

EDWARD H. McMATH, A.M.

EMORY S. BOGARDUS, Ph.D.

JOHN G. HILL, Ph.D.

JAMES M. DIXON, L.H.D.

ROY MALCOM, Ph.D.

EDGAR VON FINGERLIN, Ph.D.

FESTUS E. OWEN, A.M.

ALLISON GAW, Ph.D.

SAMUEL RITTENHOUSE, Ph.D.

LAIRD J. STABLER, Ph.C., Sc.D.

It is the function of the Graduate Council: (1) To define conditions of admission to the Graduate Department; (2) to provide courses of graduate instruction, and to pass judgment upon the graduate courses offered by the respective departments, no one of which courses shall become operative without the approval of the Council; (3) to pass upon the credentials of all candidates for graduate standing; (4) to establish and to maintain the requirements for all graduate degrees; (5) to formulate regulations for the effective organization and administration of the Graduate Department.

## ADMISSION TO THE GRADUATE DEPARTMENT

Admission to the Graduate Department of the College of Liberal Arts is granted to graduates of this College and to graduates of other colleges and scientific schools of recognized standing who present satisfactory evidence of character and qualifications. Other persons of suitable age and satisfactory attainment may be admitted to the advantages of the graduate courses upon approval by the Council. Admission to the courses of the Graduate Department does not necessarily imply admission to candidacy for a graduate degree.

An undergraduate student who is within 24 units of the Bachelor's degree may be permitted, with the approval of the Graduate Council and the major professor, to take graduate courses, provided that he be not carrying more than 12 units of undergraduate work. Such a student may register for only sufficient graduate work to bring the total number of units carried to fifteen. In all such cases a student must at the opening of the semester petition the Graduate Council for admission to the graduate courses he desires to take. If such a student afterwards matriculates for the degree of

Master of Arts, the graduate courses previously taken by him are entered as "already completed" in his curriculum.

The steps required for admission to the Graduate Department are: 1. Consultation with the Chairman of the Graduate Council; 2. Consultation with the head of the department in which the student desires to do his major work; 3. Appearance in person before the Graduate Council for such further interrogation as that body may deem advisable. At the time of making application the student should present his credentials, including (1) his baccalaureate diploma; (2) certified transcripts from the records of institutions previously attended, listing all his preceding courses with their unit-values and the grades attained in each course; and, in the case of applicants seeking a high school teacher's credential, (3) certificates testifying to the quality of any previous teaching experience and the number of months during which such experience continued. Documents of the second and third classes above specified are retained by the University as matters of permanent record. If they are not immediately at hand at the time of the applicant's seeking admission, registration of the student is merely tentative, pending their presentation.

## DEPARTMENTS OF GRADUATE STUDY

The University is at present offering graduate courses in the following subjects:

Applied Mathematics (Engineering), Biology (animal), Biology (plant), Chemistry, Economics, Education, English, French, German, Greek, History, Latin, Mathematics, Oriental Studies, Philosophy, Physics, Political Science, Psychology, Religious Education and Sociology.

## THE DEGREE OF MASTER OF ARTS

The attainment of the degree of Master of Arts (A.M.) depends upon the completion of a well-rounded and carefully organized undergraduate and graduate course, at the end of which the candidate shall offer proof of high and sound intellectual attainment in his major subject, together with maturity of thought and some breadth of view. Under no circumstances will the degree be conferred until the candidate has completed, beyond this University's requirements for the Bachelors' degree, twenty-six units of graduate work, inclusive of the thesis; but **the mere satisfaction of any time or**

course-unit requirement, taken by itself, confers upon the candidate no right to the degree, his achievement of it depending mainly upon his natural abilities and his stage of scholarly advancement. Undergraduate courses taken at other institutions are accepted at their full value so far as they conform to the standards of the various undergraduate departments of this University. Graduate courses from other institutions are similarly recognized, subject to the conditions of study "in residence" as hereafter prescribed.

Each candidate for the degree of Master of Arts must be registered in the Graduate Department of the College of Liberal Arts not later than the first Tuesday in October preceding his final A.M. examinations, and must pursue his course "in residence" for not less than one academic year. In this connection the term "in residence" is to be interpreted as meaning that the student is taking not less than four graduate units per semester, with the proviso that, as a rule, at least twelve of the units credited toward the attainment of the degree must be pursued at this University. For "residence" two summer sessions may be counted as equivalent to one semester.

The candidate who has not previously done graduate work in this University will begin his registration by applying for admission to the Graduate Department by the method above indicated. He will then state the course of study which he wishes to pursue, which course must consist of a principal or "major" subject closely related to the major subject of his undergraduate course, and one or two subordinate or "minor" subjects satisfactorily related to the major subject and requiring not more than one-half the time given to it.\* The details of his course in this University will be determined upon consultation with the head of the department in which he wishes to major; and no subjects or units lacking the approval of the departmental head will be credited toward the degree.

A part of the course will consist of the completion of a thesis or dissertation embodying the results of an investigation on some subject in the major department. It is not

---

\*Attention is called to the fact that in connection with the College of Liberal Arts the word "minor" is used in three different senses. An "undergraduate minor" consists of the prescribed minor work in any subject approved by the undergraduate major department. A "minor recommendation" for the High School Teacher's Certificate may be granted when the student receives his major recommendation, if he has had at least six units of work in the minor subject above Sophomore grade. A "minor" for the degree of Master of Arts must consist wholly of work of graduate standard.

the intention of the Graduate Council that this shall be a piece of highly recondite research such as would befit candidacy for the degree of Doctor of Philosophy; but it must be a serious, considerable, and printable piece of work demonstrating the writer's power of original thought, his thorough grasp of the subject matter involved, and his ability to present his material in a scholarly manner and style. The title of this essay must be presented for approval by the Graduate Council not later than six months before the month in which the degree is sought; a fairly complete bibliography must be similarly presented a month later; and the completed thesis, conforming in detail to the printed regulations furnished by the University, must be submitted to the Graduate Council six weeks before the conferring of the degree. In the case of those who are candidates for the conferring of the degree in June, these ultimate dates will be the first of December, the first of January, and the last Saturday in April.

## THE HIGH SCHOOL TEACHER'S CERTIFICATE

The law provides that the State Board of Education shall prescribe general rules under which county boards and city and county boards of education may grant regular certificates of high school grade. These rules, together with the requirements of the University of Southern California, under which recommendations for such certificates are made, are summarized below.

### Group 1—Standard Group

1. Bachelor's degree from a standard college requiring not less than eight years of high school and college training.
2. One year (twenty-six units) of graduate work which must include one full year's course in at least one subject (major subject) in which recommendation is sought.
3. The satisfaction of the departmental requirements.
4. Fifteen units in Education, which may be completed in either undergraduate or graduate standing, or the two combined. These courses must include:
  - (a) School Management, 2 units.
  - (b) Secondary Education, 2 units.
  - (c) Practice Teaching, 4 units.
  - (d) Teacher's Course in major subject, 2 or 3 units.
  - (e) Electives, 5 or 4 units.



**Group 2—Normal Graduate Group**

Must be graduate of a California State Normal School or other accepted Normal school.

1. Bachelor's degree as in Group 1.
2. One-half year (fourteen units) of graduate work.
3. Departmental requirements, as in Group 1.
4. Five units in Education, which must include
  - (a) Secondary Education, 2 units.
  - (b) Teacher's Course in major subject, 3 units.

**Group 3—Experienced Teachers Group**

A. Candidate having taught not less than one year (eight months) with success in any elementary or secondary school.

1. Bachelor's degree as in Group 1.
2. One year of graduate work, as in Group 1.
3. Departmental requirements, as in Group 1.
4. Eleven units in Education, which must include
  - (a) Secondary Education, 2 units.
  - (b) Teacher's Course in major subject, 2 or 3 units.
  - (c) Electives, 7 or 6 units.

B. Candidates who have taught or been engaged in school supervision for not less than twenty months.

1. Bachelor's degree as in Group 1.
2. One-half year of graduate work, as in Group 2.
3. Departmental requirements, as in Group 1.

**Group 4—Special Normal Course Group**

Candidates who desire to spend one-half year at the University and complete their work at a State Normal School offering a special course for college graduates.

1. Bachelor's degree as in Group 1.
2. One-half year of graduate work, as in Group 2.
3. Departmental requirements, as in Group 1.
4. Five units in Education, as in Group 2.
5. One-half year (following the graduate study) in an approved Normal school.



**Group 5—Library School Group**

Candidates who desire to spend the graduate year at the California State Library School following a course specially arranged for college graduates.

1. Bachelor's degree as in Group 1.
2. One year graduate study at the California State Library School.
3. Departmental requirements (thirty units in the major and required work in the minor).
4. Fifteen units in education, as in Group 1.

The departmental requirements mentioned above are in addition to the technical requirements laid down by the State Board of Education. The University of Southern California requires as preliminary to any recommendation for the teacher's certificate, the completion of enough work (and of sufficiently high grade) in at least one subject to secure a University recommendation that the candidate is fitted to teach that subject in high school classes. If the candidate's undergraduate preparation in the stated subject has been satisfactory, this may be obtained in the time-limits specified above.

## DEPARTMENTS OF INSTRUCTION

*Lower Division courses are given numbers from 1 to 99; Upper Division courses, 100 to 199; Graduate courses, 200 to 299. Ordinarily students should elect only courses in the divisions in which they are enrolled.*

*Courses marked "throughout the year" are continuous courses and cannot be commenced in the second semester.*

### AGRICULTURE

GILBERT E. BAILEY, LAIRD STABLER, ALBERT B. ULREY,  
ANDREW C. LIFE, SAMUEL RITTENHOUSE, Professors

The subjects that underlie practical agriculture are taught in the courses listed below. In these may be laid a foundation, broad as the range of practice and interests of the farmer at the present day, and upon which the student may build a career as an agriculturist or develop into a specialist in some one department of that field.

**1. Mineral Composition of Soils.** A study of the more important minerals. Laboratory, recitations and lectures. See Geology 2. Two units, throughout the year. (Bailey.)

**2. Field Botany and Taxonomy.** The habitats, pollination and relationship of plants. See Botany 2. Three units, either semester. (Life.)

**3. Ecology.** The relation of plants to their environment of soil, water, physiography, etc. Prerequisite, Botany 1. Two units, second semester.

**4. Plant Physiology.** See Botany 4. Prerequisite, Botany 1. Three units, first semester. (Life.)

**101. Agricultural Geology.** Lectures on the origin, composition, classification and naming of soils; control of aeration and moisture condition; physical analysis of soils. Two units, either semester. (Bailey.)

**102. Agronomy.** Lectures on methods of cultivation of the different types of soils; effect of tillage, soil hygiene; adaptation to crops; fertility of soils, fertilizers. Two units; first semester. (Bailey.)

**110. Economic Botany.** This course deals with the parasitic fungi and other economic phases. See Botany 105. Two units; either semester. (Life.)

**111. Plant Propagation and Genetics.** A study of the principles of plant propagation. See Botany 104a. Two units; second semester. (Life.)

**120. Embryology.** The general problems of comparative embryology, with special application to the chick and the frog. Prerequisites, Zoology 1 and 104. Three units; second semester. (Rittenhouse and assistants.)

**121. Mammalian Anatomy.** The dissection and study of type mammals. See Zoology 107. Three units; second semester. (Rittenhouse.)

**122. Economic Entomology.** Orchard, field crop, and garden insect pests, the forest insects and household visitors. Consideration is given the control and eradication of insect depredations, the composition and application of insecticides, and farm management to eliminate injurious insects. Lectures and laboratory work. Prerequisite, course 1 in Zoology (or an equivalent amount of Botany together with the insect aspects of course 1). Three units; second semester. (Rittenhouse.)

**123. Parasitology.** The organization, life history, and evolution of parasites; the protozoa and their relation to disease; the role of insects, ticks, and mites in the transmission and propagation of disease, together with their control as a phase in medical entomology; and a study of helminthes and larger parasites. Lectures and laboratory work. Prerequisite, course 1 (or equivalent in Botany) and General Biology 3 (Bacteriology). Three units; first semester. (Rittenhouse.)

**130. Heredity.** An introductory course on heredity dealing with the physical basis of inheritance, the laws of variation and heredity, their application to economic and social problems. Two units; first semester. (Ulrey.)

**131. Bacteriology.** The nature of the bacterial organism; its relation to disease; methods of cultivating and isolating it; inoculation experiments; staining of sections; examination of water; etc. Prerequisite, Botany 1 or Zoology 1. Three units; first semester. (Ulrey.)

**140. Chemistry of Agricultural Products.** A lecture course involving a critical study of soils, fertilizers, irrigation waters,

and agricultural products. Should be accompanied or followed by course 141. See Chemistry 110. One unit; first semester. (Stabler.)

**141. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, and similar substances. Prerequisite, course 4 in Chemistry. See Chemistry 110a. Three units; either semester. (Stabler.)

For other courses of interest to the student of Agriculture see also:

- Physical Chemistry. Chem. 109.
- Mechanical Drawing. Draw. 1.
- Architectural Drawing. Arch. 3.
- Surveying. Civil Eng. 1, 2, and 13.
- Hydraulics. Civil Eng. 109.
- Irrigation. Civil Eng. 110.
- Water Supply. Civil Eng. 111.
- Shop Work. Physics 21.
- Rural Sociology. Sociol. 118.
- Labor Problems. Econ. 102.

## ART AND DESIGN

W. L. JUDSON, A. C. WEATHERHEAD, Professors  
REXFORD NEWCOMB, Lecturer

AIME B. TITUS, AVA C. WELLS, MARIAN LEAVER, H. SCOTT  
GERITY, Instructors

**1. Freehand Drawing.** Drawing from geometrical solids and casts in pencil and charcoal. Lectures on the principles and processes of freehand drawing and freehand perspective. Three hours, one unit; either semester. (Weatherhead.)

Note.—Art and Design 1 or its equivalent is in general a prerequisite to all other courses in Art and Design.

**2. Drawing From the Antique.** A continuation of course 1. Drawing from casts in charcoal and wash. Three hours, one unit; second semester. (Wells.)

**3. Still Life.** Painting of still life in pastel and water color. Three hours, one unit; throughout the year. (Leaver.)

**4. Drawing from the Figure.** Drawing and painting from the costumed model, in pencil, charcoal, pen and ink, and color. Six hours, two units; throughout the year. (Wells.)

**5. Out-of-Door Sketching.** Landscape in charcoal, water color, and oils. Sketching trips to the hills and to the beach

on pleasant days. Three hours, one unit; throughout the year. (Weatherhead and Leaver.)

**7. Elementary Design.** The general principles that govern design. Lectures and class problems. Three hours, one unit; throughout the year. (Leaver.)

**9. Clay Modeling.** The modeling of ornament and parts of the human figure from casts. The designing and building of pottery. Three hours, one unit; second semester. (Leaver.)

**10. Commercial Art.** Practical problems in poster designing, designing advertisements, and cartooning. Varied to suit the needs and desires of individual students. Prerequisite, Art and Design 1, 4, and 7. Six hours, two units; throughout the year. (Titus.)

**12. History of Art.** A brief general course tracing the development of art through the most important periods. Two units; throughout the year. (Newcomb.)

## BIOLOGY.

ALBERT B. ULREY (Zoology), ANDREW C. LIFE (Botany),  
SAMUEL RITTENHOUSE (Zoology), Professors  
CATHERINE V. BEERS (Zoology), Assistant Professor  
FRANK S. DAGGETT (Animal Distribution), L. E. WYMAN (Animal  
Ecology), Lecturers  
DORA U. NOBLE, A.B. (Zoology), Research Assistant  
JOHN M. ZUCK, FRANCIS R. McCREA (Zoology), Assistants  
STANLEY PATTON, HALLIE MARVIN, GERTRUDE BRETHAUR  
(Botany), Assistants

Courses adapted to the needs of students who do not major in Biology but who desire some knowledge of organic nature and training in scientific methods: General Zoology, Bio-nomics and Zoology 108, or Botany 1 and 2 or 4.

Courses affording preparation for directors of Physical Education and Health and Development: Zoology 1-3; 104-107; General Biology 1-3a; 104.

Courses preparing for Agriculture: Zoology 1-3; 104-109; Botany 1-5; 105, 107, 108; General Biology 1-3; 104; certain courses in Chemistry, Physics and Geology; general studies required in the course to be pursued. The equipment of the department is described on pages 172-175.



**Zoology**

## LOWER DIVISION COURSES

**1. General Zoology.** This course is designed to give a general knowledge of the animal kingdom and an introduction to more advanced courses in biology. In the laboratory each student studies with the microscope, or dissects, typical animals selected from the different groups from the simple to the more complex forms. The lectures co-ordinate the laboratory work, show the natural relationships of animals and explain the general problems of biology. Four units; throughout the year. (Rittenhouse, Beers.)

**2. Physiology.** Lectures and laboratory work on the activities of living organisms. Special study of the physiology of the human body. Prerequisites, course 1 or Botany 1. Three units; second semester. (Ulrey, Beers.)

## UPPER DIVISION COURSES

**103. Systematic Zoology.** The course deals with certain groups of vertebrates with reference to (a) taxonomy and bibliography of some group; (b) ecology, giving particular attention to the animal in its usual environment. Laboratory study with field work and lectures. Two units; first semester. (Ulrey, Daggett, Wyman.)

**104. Histology.** This course gives the student an opportunity to study the chief tissues of the mammalian body; and to learn the methods of preparation of tissues, with practice in cutting, staining and permanently mounting sections. Laboratory work and lectures. Prerequisite, course 1. Three units; first semester. (Rittenhouse.)

**105. Embryology.** A course which deals primarily with the study of the development of the hen's egg and the formation of the organs in the embryo chick. In the laboratory the student learns to make his own serial sections. The lectures include the general problems of comparative embryology, with special application to the chick and the frog. Prerequisites, courses 1 and 104. Three units; second semester. (Rittenhouse and Assistant.)

**106. Comparative Anatomy of Vertebrates.** The laboratory work consists of dissection of the main types of the vertebrate animals, and a study of the relationships of the different systems of organs. The lectures deal with a com-

parative study of the organs of the vertebrate body, especially from the standpoint of development. Prerequisites, courses 1, 104 and 105. Three units; first semester. (Rittenhouse.)

**107. Mammalian Anatomy.** The course consists of a careful dissection and study of type mammals, especially the rabbit, cat and dog; with collateral reading in human anatomy. In the lectures special attention is given to the nervous, blood and skeletal systems, including an outline of their development. Prerequisite, course 1. Three units; second semester. (Rittenhouse.)

**108. Economic Entomology.** A study of orchard, field crop, and garden insect pests, the forest insects and household visitors. Consideration is given the control and eradication of insect depredations, the composition and application of insecticides, and farm management to eliminate injurious insects. Lectures and laboratory work. Prerequisite, course 1 (or an equivalent amount of Botany together with the insect aspects of course 1). Three units; second semester. (Rittenhouse.)

**109. Parasitology.** The organization, life history, and evolution of parasites; the protozoa and their relation to disease; the role of insects, ticks, and mites in the transmission and propagation of disease, together with their control as a phase in medical entomology; and a study of helminthes and larger parasites. Lectures and laboratory work. Prerequisite, course 1 (or equivalent in Botany) and General Biology 3 (Bacteriology). Three units; first semester. (Rittenhouse.)

**110. Special Zoology.** An investigation of some topic of limited scope. This course is planned to meet the needs of each student prepared to pursue it. Six hours per week, throughout the year. Prerequisites, courses 1, 2, 3, 4, and 5, or their equivalent. Three units; throughout the year. (Ulrey.)

**211. Teacher's Course.** A study of the problem of teaching Zoology and Biology in the secondary schools. Two units; first semester. (Ulrey, Beers.)

**Major Work in Zoology.** Courses 1-2; 103-106; General Biology, courses 103, 104, and 106.

**Minor Work in Zoology.** Zoology 1 and General Biology 103.

**High School Teachers' Recommendation in Zoology:** 1, General Zoology; 2, Physiology; 103, Systematic Zoology; 106, Anatomy of Vertebrates. General Zoology: 1, Personal Hygiene; 2, Sanitary Science; 103, Bacteriology; 104, Bionomics.

### General Biology.

#### LOWER DIVISION COURSES

**1. Personal Hygiene.** Lectures and recitations on the preservation and improvement of health. The course deals with the functions and care of the body with a view to attaining the greatest possible degree of efficiency. Open to all students. Two units; first semester. (Ulrey.)

**2. Sanitary Science.** A course of lectures on public hygiene. The study includes (1) the nature of infectious diseases, their dissemination and control; (2) the problems of water supply and sewage; (3) the distribution and care of foods in relation to the public health; (4) sanitary surveys of residences, resorts, and public buildings; (5) the various agencies for the federal, state and municipal supervision of public health. Two units; second semester. (Ulrey.)

**3. Principles of Biology.** A lecture course on the general principles of Biology. Elective for students who have no zoology or botany, but wish some knowledge of animal and plant life. Two hours per week; second semester. (Ulrey.)

#### UPPER DIVISION COURSES

**100. Heredity.** An introductory course on heredity dealing with the physical basis of inheritance, the laws of variation and heredity, their application to economic and social problems. Two units; first semester. Not offered 1917-'18. (Ulrey.)

**101. History of Biology.** This course traces the development of biology and brings out the chief contributions made to the science by the great naturalists from Aristotle to the present time. Lectures, collateral reading and papers. Prerequisite, Course 1. Two units; second semester. (Rittenhouse.)

**103. Bacteriology.** A study in the laboratory and by means of lectures of the nature of the bacterial organism; its rela-

tion to disease; methods of cultivating and isolating it; inoculation experiments; staining of sections; examination of water; etc. Prerequisite, Botany 1 or Zoology 1. Three units; first semester. (Ulrey.)

**104. Bionomics.** A course of lectures dealing with the fundamental principles of Biology. The problems of inheritance, development, and sex are considered from the cytological standpoint throughout the first semester. Variation, heredity, selection, regeneration, and kindred topics are studied during the second semester. Prerequisite, General Zoology or General Botany. Two units per week; throughout the year. (Ulrey.)

**105. Microscopical Technique.** A course dealing with special methods of Microscopy. Laboratory work and lectures. Two units; either semester. (Ulrey.)

**106. Seminar.** The advanced students and instructors of the department meet for reports on special investigation and present-day problems of biology. One unit; throughout the year. (Ulrey, Rittenhouse.)

**107. Journal Club.** Reports on the current literature of Biology. One unit; throughout the year. (Ulrey.)

### **At the Venice Marine Station**

Primarily for Graduate Students

**208. Biological Survey.** A study of the marine animals and plants of the region, including their habitat, classification, distribution, and life habits. (Ulrey, Rittenhouse.)

**209. Experimental Biology.** The course consists of a study of some special problem of biology for which the student's training prepares him. (Ulrey, Rittenhouse.)

**210. Research.** A limited number of private laboratories are available for free use by investigators who are prepared to carry on such work. Investigation may be carried on throughout the year. Application for these privileges should be made to the director of the station. (Ulrey, Rittenhouse.)

**Summer Course.** The course consists of a study of Marine Biology in connection with the explorations carried on by the use of the station launch, the Anton Dohrn. The work is given at the laboratories of the Venice Marine Biological Station. Formal instruction is given only during the regular summer session of the University.



**Botany****LOWER DIVISION COURSES**

**1. General Botany.** The course comprises a study of typical plants representing the vegetable kingdom. The general morphology and structure of types of thallophytes, archegoniates, and spermatophytes are studied. Attention is also given to habitat, environment, and general physiological processes, and the agricultural phases of plants. Laboratory study, field work, and lectures. Four units; throughout the year. (Life, and assistants.)

**2. Field Botany and Taxonomy.** A study of flowering plants (spermatophytes) in the local flora. The course deals with habitats, pollination, and the relationship of plants. Lecture and six laboratory hours per week, one semester. Three units; either semester. (Life.)

**3. Ecology.** The relation of plants to their environment of soil, water, physiography, etc., and their structural adaptations. Especially suited to agricultural students. Lectures, field and laboratory work. Prerequisite, course 1. Two units; second semester.

**4. Plant Physiology.** Experimental work on the physiology of plants; lectures and supplementary reading. This course includes general experiments on the work and processes carried on by living plants, and experiments on the fundamental processes with precise recording apparatus. Prerequisite, course 1. Three units; first semester. (Life.)

**UPPER DIVISION COURSES**

**105. Economic Botany.** This course deals mainly with the parasitic fungi, their structure, dissemination and relation to cultivated plants; also other economic phases of plants are given attention in the course. One lecture and three laboratory hours per week. Two units; either semester. (Life.)

**105a. Plant Propagation and Genetics.** A study of the principles of plant propagation with some practice in garden and field; also problems of variation and heredity in relation to phylogeny and the improvement of plants. Lectures, quizzes, and field work. Two units; second semester. (Life.)

**106. Teachers' Course.** A series of experiments and exercises on the growth, structure, economic bearing and propagation of plants. The place of Botany in the high school cur-



riculum and the principles that determine the selection, organization, and use of botanical materials in the high school are discussed. Two units; first semester. (Life.)

**107. Plant Anatomy and Histology.** The minute structure of the systems and tissues. Microscopical technique in preparing permanent mounts. Laboratory work and lectures. Prerequisite, course 1. Two units; either semester. (Life.)

**208. Marine Algae.** The morphology, classification, and ecology of the marine flora, including collecting, mounting, and preserving the algae of the adjacent coast. Three units; either semester. (Life.)

**209. Advanced Botany.** Special problems in advanced study of plants for which the student is fitted by previous training. Three units; either semester. (Life.)

**210. Botanical Journal Club.** One unit; throughout the year. (Life.)

**Major Work in Botany.** Course 1-3, 104, 105, upper division courses, eight units; General Biology 103, Bacteriology.

**Minor Work in Botany.** Botany 1, 2, and 4.

**High School Teachers' Recommendation in Botany:** 1, General Botany; 2, Field Botany and Taxonomy; 4, Plant Physiology; 105, Economic Botany, or 105a, Plant Propagation and Genetics; 106, Teachers' Course; 107, Plant Anatomy and Histology, or 208, Marine Algae. General Biology: 3, Bacteriology; 104, Bionomics.

## CHEMISTRY

LAIRD J. STABLER and LEROY S. WEATHERBY, Professors  
EDWIN F. RATHJEN, Assistant Professor  
GEORGIANA E. QUICK, Storekeeper  
GRACE ASHMORE, LELAND L. REBBER, BURNELL TUNISON,  
HATTIE HOENSHHELL, ATTILIO BISSIRI, JENNIE DUBIN,  
ROBERT E. VIVIAN, PERCY E. PALMER, Assistants

### LOWER DIVISION COURSES

Students without entrance credit in Chemistry should register in courses 1 and 1a; those with entrance credit should register in 2 and 2a. Courses 2, 2a, 3 and 3a are prerequisite to all later courses in chemistry and comprise the required work in the engineering courses.

**1. General Inorganic Chemistry.** A lecture and recitation course, covering the principles of inorganic chemistry. Open only to students who do not present entrance credits in chemistry. To be accompanied by course 1a. Three units; first semester. (Rathjen.)

**1a. General Inorganic Chemistry.** A laboratory course to accompany course 1. Two laboratory periods a week. Two units; first semester. (Rathjen.)

**1s. Elementary Organic, Food, and Textile Chemistry.** Lectures and recitations introducing the composition and the chemistry of the simple fundamental organic compounds, especially those related to daily life. The course includes a special study of foods and food values, fuels, fabrics, dyes, perfumes, poisons, adulterants, natural and artificial coloring compounds, and kindred topics. It is recommended to all non-technical students and is open to all who have had entrance chemistry or courses 1 and 1a.

(It is advised that students desiring this course who have had entrance chemistry, register the first semester in courses 2 and 2a.)

To be accompanied by course 1s.a. Three units; second semester. (Weatherby.)

**1s.a. Elementary Organic, Food, and Textile Chemistry.** A laboratory course accompanying and supplementing the work of course 1s. Two laboratory periods a week. Two units; second semester. (Weatherby.)

**2. Inorganic Chemistry.** Non-metals. Lectures and recitations with classroom demonstrations. Especial emphasis is placed on the principles and laws of inorganic chemistry, and their application in analytical work. To be accompanied by course 2a. Three units; first semester. (Weatherby.)

**2a. Qualitative Analysis. Metals.** A laboratory course covering the reactions of the salts of the metals in known solutions, and the separation and identification of the same in unknown mixtures; the analysis of metals, amalgams, and alloys. Two laboratory periods a week. Two units; either semester. (Weatherby.)

**3. Inorganic Chemistry.** Metals. Lectures and recitations on the metals and metalloids, and their chief compounds, with especial reference to their technical value and commercial use. To be accompanied by course 2a, or course 3a. Three units. Second semester. (Rathjen.)

**3a. Qualitative Analysis.** Non-metals. A laboratory course covering the reaction of the salts of the non-metals and their identification, and the complete analysis of simple and complex salts, ores, and commercial products. Two laboratory periods a week. Two units; second semester. (Rathjen.)

**4a.; 4b. Quantitative Analysis.** Laboratory practice in gravimetric and in volumetric determinations, with occasional lectures and recitations. Three laboratory periods a week. Three units; throughout the year. (Stabler.)

#### UPPER DIVISION AND GRADUATE COURSES

**105. The Rarer Metals.** A lecture course comprising a study of the occurrence, the metallurgy, the properties, and the uses of the more important rare metals, especially those valuable for their technical uses. One unit; first semester. (Rathjen.)

**105a. Analysis of the Rare Metals.** A laboratory course involving the separation and identification of the rare metals. Especial stress is placed on the determination of these metals in their ores and in their commercial compounds. Two units; first semester. (Rathjen.)

**106a. Inorganic Preparations.** A laboratory course, including the preparation of inorganic compounds, with tests for purity and strength, supplemented by discussions on theory and methods. Prerequisite, course 4. Two units; either semester. (Stabler.)

**107. Organic Chemistry.** Lectures and recitations on the chemistry of the carbon compounds of both the aliphatic and the aromatic series. This course presupposes a knowledge of course 1s or its equivalent, but may be taken by properly qualified students without this prerequisite. Two units; throughout the year. (Weatherby.)

**107a. Organic Preparations.** A laboratory course in the preparation of typical carbon compounds in both the aliphatic and the aromatic series, to accompany course 107. Two units; throughout the year. (Weatherby.)

**107b. Organic Preparations—Advanced.** A laboratory course in the preparation of higher organic compounds, with supplementary reading on theory and methods. An extension of course 107a. Either or both semesters. (Weatherby.)

**107c. Organic Analysis.** Quantitative analysis of organic compounds according to the standard methods of combustion analysis and molecular weight determination. One unit; second semester. (Rathjen.)

**108a. Mineral Analysis.** Gravimetric and volumetric analysis of representative minerals, ores, and alloys. Prerequisite, course 4. Three units; either semester. (Stabler.)

**109. Physical Chemistry.** A lecture course on the fundamental principles and laws of chemistry. A general study of electro-chemistry is included in the work of the second semester. Two units; throughout the year. (Weatherby.)

**109a. Physical Chemical Measurements.** A laboratory course to accompany or follow course 109. One laboratory period a week. One unit; throughout the year. (Weatherby.)

**109b. Physical Chemical Measurements—Advanced.** A laboratory course with supplementary reading. An extension of the work of 109a. Either or both semesters. (Weatherby.)

**110a. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, and similar substances. Prerequisite, course 4. Three units; first semester. (Stabler.)

**111a. Medical and Pharmaceutical Analysis.** A laboratory course, including urine analysis, toxicology, and assay of pharmaceutical products. Designed especially for students looking forward to medicine or pharmacy. Open to students who have completed or are taking courses 4 and 107. Two units; either semester. (Stabler.)

**112a. Food Analysis.** A laboratory course in the quantitative determination of the composition of food products and in the detection of food preservatives and adulterants. Open to students who have completed courses 4 and 107. Two units; second semester. (Stabler.)

**113. Industrial Chemistry.** A lecture course covering the chemistry involved in the manufacture of important commercial products. The course is supplemented by lectures given by chemists from various manufacturing establishments, and by visits to technically important industrial plants. Open only to those who have completed, or are taking, course 107. One unit; second semester. - (Stabler.)



**113a. Oil and Gas Analysis.** A laboratory course in commercial oil and gas analysis. A special oil laboratory is equipped for handling crude petroleum on a basis commensurate with commercial practice. Prerequisites, courses 4 and 107. Two units; second semester. (Stabler.)

**114a. Assaying.** This course comprises silver and gold extraction by scorification and crucible methods; the fire assay of copper, lead, and tin; and the extraction of gold from ores by the amalgamation, the chlorination, the cyanide, and the electrolytic processes. Prerequisite, courses 4 and 108. Two units; second semester. (Stabler.)

**215. Seminar.** Reviews of current chemical literature; lectures on subjects of chemical interest; papers and discussions on assigned topics. Open for credit to seniors and graduate students only. Required of all graduate students. One unit; throughout the year. (Weatherby.)

**216. Research.** Research work, under the direction of the department, may be pursued by candidates for the degree of Master of Arts, in either pure or applied Chemistry. (Stabler, Weatherby.)

**217. Teacher's Course.** A study of the teaching of chemistry in secondary schools. One unit; throughout the year. (Weatherby.)

**Fees:** In all laboratory courses a fee of ten dollars each semester is required. A deposit of seven dollars is required to cover the value of apparatus used, of which the balance, less breakage, is returned at the end of the year. In course 114a a deposit of ten to thirty dollars is required to cover the cost of material consumed.

**Major Work:** Those majoring in Chemistry are advised to take courses 2, 2a, 3, 3a, 4a.b., 105, 107, 107a, 109, 109a, 113, 215, and at least ten additional units from the special analytical courses. The minimum requirement is thirty semester units subsequent to courses 1 and 1a.

**Minor Work in Chemistry:** The minimum requirement is fifteen units subsequent to courses 1 and 1a. This requirement should be met by courses 2, 2a; 3, 3a; and either 1s and 1s.a., or course 4a.b.

**High School Teachers' Recommendation.** 2, 2a, 3, 3a, Inorganic and Qualitative Analysis; 4, Quantitative Analysis; 107,



107a (or 1s and 1s.a), Organic; 109, 109a, Physical; 215, Seminar; 217, Teachers' Course; and at least two units from the advanced analytical courses.

## CLASSICAL LANGUAGES AND LITERATURES

### Greek

ELIZA G. WILKINS, Professor

#### LOWER DIVISION COURSES

1. **Elementary Greek.** A study of forms and syntax, followed by the reading of portions of Xenophon's *Anabasis*, and exercises in prose composition. Three units; throughout the year.

#### UPPER DIVISION COURSES

102. **Greek Prose Writers.** Selected orations of Lysias and Demosthenes: Plato's *Apology*. Lectures on the rise and development of Greek oratory, and the political and judicial institutions of Athens. Open to students who have completed course 1, or who offer at least two years of Greek for entrance. Three units; first semester.

103. **Greek Prose Writers**, continued. Plato's *Apology* (continued) and *Crito*: Selections from Herodotus and Thucydides. Lectures on the Greek philosophers, and a survey of the period covered by the historians studied. Open to students who have completed course 102. Three units; second semester.

104. **Homer.** *Iliad*, Book I, selections from Books II and III: *Odyssey*, rapid reading of several books. Lectures on the Mycenaean Age, and the Homeric Problem. Open to students who have completed courses 102 and 103 or their equivalent. Three units; first semester.

105. **Greek Tragedy.** Aeschylus' *Prometheus Bound*: Sophocles' *Oedipus Tyrannus* or *Antigone*. Lectures on the rise and development of the Greek drama, the Greek theater and other plays not read in the class. Open to students who have completed the preceding courses. Three units; second semester.

106. **History of Greek Literature.** A lecture course accompanied by the reading of the more important masterpieces in translation. Designed for students not majoring in the department. Two units; first semester.

**107. History of Greek Art.** A brief study of Greek architecture, followed by lectures on the development of Greek sculpture and its more important remains. Open to all Upper Division students. Two units; second semester.

#### GRADUATE COURSE

**208.** The authors read in this course will vary from year to year according to the previous work and tastes of the students concerned.

#### Latin

RUTH W. BROWN, ELIZA WILKINS, Professors  
WELCOME TILROE, Instructor

#### LOWER DIVISION COURSES

**1a. Elementary Latin.** A course in forms and syntax, followed by the reading of simple prose and selections from Caesar. Five units; throughout the year.

**2b. Intermediate Latin.** Selected orations of Cicero: Virgil's Aeneid, Books I-IV, and parts of Book VI. Intended for students who have completed 1a, or two years of High School Latin. Four units; throughout the year.

**Note**—Courses 1a and 2b count toward the Bachelor's degree, but will not be accepted as major or minor work in the department.

**3. Cicero and Livy.** Cicero's De Senectute, and selected Letters; Livy, Book XXI. Open to students who present four units of Latin for entrance, or who have completed 2b. Four units; first semester.

**4. Livy and Horace.** Livy, Book XXII; Horace, Odes and Epodes. Open to students who have completed course 3. Four units; second semester.

**5. Latin Prose Composition.** To accompany courses 3 and 4. One unit; throughout the year.

**6. Latin Sight Reading.** Open to Sophomores. One unit for the year's work.

#### UPPER DIVISION COURSES

**107. Latin Comedy.** Plautus, Captivi and Trinummus; Terence, one play. Lectures on the sources and development of Roman comedy, the Roman theater, and the place of the drama in Roman life.

**108. Tacitus and Pliny.** Tacitus, *Germania* or *Agricola*: Pliny, selected Letters. The history of the period will be given due emphasis, and the features of Roman private life suggested by the letters of Pliny. Three units; second semester.

**109. Outlines of Latin Literature.** A general survey course for students majoring in the department. The course will consist in part of lectures on the different periods of Roman literary effort, and the influences affecting the content and style of representative works. Reports, collateral reading, and the translation of various selected passages will be called for. Two units; first semester.

**110. Horace's Satires and Epistles.** The first book of the Epistles will be read with special effort to appreciate the poems in the original, independent of translation. Selections from the second book of Epistles and the Satires. Two units; second semester. (Not offered in 1917-1918.)

**111. Juvenal and Martial.** Selections from the Satires of Juvenal and Martial's Epigrams, studied with special reference to Roman life and customs. Two units; second semester.

**112. Studies in Virgil.** Rapid reading of Aeneid VI-XII. A study of the Eclogues and their sources. Selections from the Georgics. Two units; second semester. (Not offered in 1917-1918.)

**113. History of Latin Literature.** A lecture course, designed for students who are not taking Latin in college. Selections from the masterpieces of Latin literature will be read in translation. This course should properly follow the History of Greek Literature (Greek 106). Two units; second semester.

#### GRADUATE COURSES

**216. The Teaching of Latin.** A study of methods and problems through reports and discussions, accompanied by informal lectures on the leading principles of Historical Grammar and scientific methods of Syntax study. Open to Seniors by special permission. Two units; first semester.

**217. Advanced Latin Prose Composition.** One unit; throughout the year.

**218. Roman Philosophical Writers.** Selections from Lucretius: A brief consideration of the philosophical writings of

Cicero and Seneca, with reference to their source and content. Two units; first semester.

**219. Prose Writers of the Empire.** Selections from Petronius, Pliny the Elder, Quintilian, Suetonius and Apuleius. Two units; second semester.

**220. The Latin Seminar.** Roman Elegiac Poetry. Lectures on the history of the elegy and epigram down to the Augustan Age. A critical study of Tibullus' poems, followed by a less detailed study of Propertius and Ovid. Two units; throughout the year.

**Major Work:** Thirty semester units, twenty of which must be in Latin. Under ordinary circumstances students will be strongly urged to present at least twelve units of Greek.

**Minor Work:** Latin 3, 4 and 5; or Greek 102, 103 and 104.

**High School Teacher's Recommendation:** An undergraduate major course followed by a minimum of seven graduate units, including course 216, and at least one semester of 217.

## DRAWING

A. C. WEATHERHEAD, A. W. NYE, C. W. LAWRENCE, Professors

**1. Mechanical Drawing.** The use and care of instruments, lettering, geometrical problems, conic sections, oblique and isometric projection, and orthographic projection. Six hours, two units; first semester. (Weatherhead.)

**Note**—Drawing 1 or its equivalent is a prerequisite to all other courses in drawing except Drawing 10.

**2. Mechanical Drawing.** A continuation of course 1. Lettering, mathematical curves, line shading, intersection and development of surfaces, working drawings, tracing and blue printing. Six hours, two units; second semester. (Weatherhead.)

**3. Architectural Drawing.** A course in architectural lettering, detailing, and the preparation of working drawings. See Architecture 10. Six hours, two units; throughout the year. (Weatherhead.)

**4. Technic of Drawing.** Lettering, title building, freehand drawing in pencil arranged especially to meet the needs of engineering students, line shading, and the technical details



of drafting in connection with electrical diagrams, topographic mapping and steel construction. Six hours, two units; first semester. (Weatherhead.)

**5. Machine Drawing.** The drawing of details and assemblies of machine parts from sketches made in the laboratories or from blue prints. Designing simple machines. Tracing and blue printing. Six hours, two units; second semester. (Weatherhead.)

**6. Descriptive Geometry and Stereotomy.** A study of the problems relating to the point, line, and plane, and their application to practical engineering problems, intersection and development of surfaces, shades and shadows, perspective, and stereotomy. Six hours, two units; throughout the year. (Weatherhead.)

**7. Machine Design.** Advanced course in mechanical and electrical design, detailing, working drawings of complicated machine details, study of standard commercial machine parts, shop practice, strength of parts, use of tables, formulae, slide rule, gearing, estimating, specifications, structural iron and steel. Three units; second semester. (Nye.)

**8. Shades and Shadows.** Brief and accurate methods for determining the shadows of geometrical lines, plane figures, and solids, and their application to the casting of conventional shades and shadows on the principal architectural members. Six hours, two units; second semester. (Weatherhead.)

**9. Perspective.** The theory and application of the different methods of drawing architectural perspectives. The perspective of shadows and reflections. Six hours, two units; second semester. (Weatherhead.)

**10. Drawing for Science Students.** The use of drawing instruments, lettering, freehand drawing in pencil and in pen and ink from scientific objects, simple projection, line, stipple, and wash shading, and patent drawings. Arranged to meet the needs of individual students. Six hours, two units; either or both semesters. (Weatherhead.)

**100. Graphic Statics.** The graphical determination of stresses in engineering structures. See Civil Engineering 115. Three hours, one unit; first semester. (Lawrence.)

**101. Structural Design.** Complete designs for steel bridges, roofs, and other structures. See Civil Engineering



118. Seven hours, three units; throughout the year. (Lawrence.)

**102. Teachers' Course.** A study of the subject matter, text books, and methods of presenting a high school mechanical drawing course. Students in this course are required to audit in other drawing classes from time to time. One unit; first semester. (Weatherhead.)

## ECONOMICS

ROCKWELL D. HUNT, Professor

CARL S. KNOPF, Assistant Professor

OLIVER J. MARSTON, Associate

MARGARET T. HODGEN, C. A. WAYNE, Lecturers

ELMER S. NELSON, Assistant

### LOWER DIVISION COURSES

**1. Principles of Economics.** A comprehensive introduction to economic studies, based upon a recent text, lectures, assigned readings, and student exercises. The elements of economic life, and the principles and problems of Production, Distribution, and Consumption, with particular reference to American conditions and concrete problems. Three units; throughout the year. (Hunt and Knopf.)

**Note**—Economics 1 is recommended to students taking the six hours requirement (History or Economics) in this department. It is in general prerequisite to all other courses in Economics.

**2. Money, Credit, and Banking.** The origin and evolution of money, with special attention to the problems of metallic and paper money; the history and theory of banking, with examination of leading systems and special problems. Three units; first semester. (Marston.)

**3. Public Finance.** A study of budgetary science, the principles and practice of taxation, public expenditures, and financial administration. Much attention is given to federal, state, and local taxation in the United States. Three units; second semester. (Marston.)

**4. Fiscal and Industrial History of America.** A comprehensive survey of American economic development and of national legislation in the fields of currency, finance, and the tariff, studied in relation to the evolution of commerce and industry. In addition to the use of texts and extended readings, students will be directed to a limited number of documentary sources. Two units; first semester. (Knopf.)

**5. Economic Geography.** A survey of the history and present status of industry and commerce in the principal countries; study of natural advantages in the world market, and of national policies in the development of resources, with special attention to the United States. (Same as Geology 104). Two units, second semester. (Bailey.)

UPPER DIVISION COURSES

**101 Municipal Problems.** The rise and growth of the modern city. Chief emphasis is placed on American municipal government. Economic, administrative, and social problems are considered. The regular work of the class is supplemented by a series of special lectures by leading practical experts. Three units; first semester. (Hunt.)

**102. Labor Problems.** The important labor problems of the day, with special reference to American conditions. The history and problems of labor organizations, strikes and lock-outs, industrial arbitration, profit-sharing, woman and child labor, etc. Three units; second semester. (Hunt.)

**103. Immigration.** A study of the general causes of migration in the world's history; European backgrounds of immigration to the United States. Attention is given to the history of immigration to the United States, with special emphasis on present-day immigration problems. The course closes with a study of the foreign races in Southern California, and of the problems likely to arise. (Same as Sociology 103). Three units; second semester. (Bogardus.)

**104. Corporations.** Causes, growth and forms of corporations; their promotion, financiering, incorporation, capitalization and consolidation. The analysis of reports, stock speculation, receiverships and reorganizations. Social and political effects; the position and relation of stockholders and directors. Two units; first semester. (Marston.)

**105. Transportation and Communication.** The theory and history of transportation; the development of the railroad, its organization, management, and consolidation. Ocean and inland waterways. Problems of rebates, public regulation, etc. Postal service and express companies. Two units; second semester. (Marston.)

**106. Commercial Organization.** After giving attention to the leading extractive industries, such as agriculture, mining and forestry, special studies are made in certain industries,

each student being required to study intensively some one field and present a report. Special problems include population, marketing, business organization and industrial finance. Two units; first semester. (Marston.)

**107. Business Administration.** An examination of the principles underlying the modern organization of business, internal, as applied to the production end, and external, as applied to the distribution end of business. Methods of business administration, with application of the principles of scientific management to institutions outside of ordinary business, as city government, schools, churches, etc. Two units; second semester. (Marston.)

**108. Socialism.** It is the aim of this course, after giving attention to the earlier history of communistic and socialistic theories and movements, to examine the underlying causes of the modern socialistic movement, study various schools of socialistic thought, and present a critical estimate\* of socialism as a philosophy of economic evolution and as a program of social reform. Two units; first semester or Summer Session. (Hunt.)

**109. The Liquor Problem.** After a brief consideration of its physiological and psycho-physical aspects, attention will be devoted to the economic aspects and social phases of the drink problem, with special reference to American conditions. Discussion of pathological conditions will be followed by an examination of leading proposals for control or elimination. Open also to sophomores. One unit; throughout the year. (Hunt.)

**110. Life Insurance.** A comprehensive lecture course on the theory and practice of Life Insurance, with special attention to the concrete problems involved. Collateral readings and student exercises. Open also to Sophomores. Two units; either semester. (Wayne.)

**111. Household Economics.** This course deals with the theory and practice of spending the income of the home. Numerous household budgets are analyzed. Informal lectures, readings and concrete applications. Two units; either semester. (Hodgen.)

#### GRADUATE COURSES

**200. Seminar.** The Seminar is designed to meet the needs of graduate students of the department; for the present it

may include also a limited number of senior undergraduates. In addition to the leading reports, which are based upon original investigation, attention is given to the reviewing of recent books and periodical literature and to topics of contemporaneous interest. Two units; throughout the year. (Hunt.)

**201. History of Economic Thought.** The development of economic thought from classical antiquity, with discussions of the different schools of economics. Extensive readings from numerous writers, with reports by the students. Two units; throughout the year. (Not given during 1917-18). (Hunt.)

**202. Recent Economic Theory.** A comparative study of the theories of leading contemporaneous economists and the tendencies of the present day, with special reference to the problems of value and the distribution of wealth. The course closes with a consideration of recent literature looking to the 'human welfare' interpretation of economic phenomena. Two units; throughout the year. (Hunt.)

**Major Work in Economics:** Thirty semester units.

**Minor Work in Economics.** Eight units in addition to course 1, at least five of which must be in upper division courses.

**High School Teacher's Recommendation:** 1, Principles; 2, Money and Banking; 3, Public Finance; 101, Municipal Problems; 102, Labor Problems; 104, Corporations, and 105, Transportation, or 106 and 107. Commercial Organization and Business Administration; 200, Seminar; 201, History of Economic Thought, or 202, Recent Economic Theory; six units of additional approved work.

## EDUCATION

THOMAS B. STOWELL, Professor

HOWARD L. LUNT, EDGAR H. McMATH, Associate Professors

ELIZABETH YODER, Assistant Professor

HUGH C. WILLETT, Principal of the University High School

JEREMIAH B. LILLARD and ELSA H. HORSTMANN, Lecturers

**101 and 102. Fundamental Psychology.** See Psychology 1 and 104. Six hours; two semesters.

**103. Principles of Education** (including General Method). A study of psychological and educational principles which



underlie the work of teaching. It considers primarily the psychology of the acts of teaching; second, the nature of the subject-matter to be learned; thirdly, how the mind of the teacher adjusts the mind of the learner to the task set, and thereby constructs the art of teaching.

A limited number of psychological experiments illustrative of the matter under consideration is followed by discussions of their respective educative values. Lectures, discussions, collateral readings, papers. Prerequisite, courses 101 and 102. Open to upper division and to graduate students. Three units; first semester. (Stowell.)

**104. Principles of Secondary Education.** (103 continued). The foundational principles; the distinctive functions of the various disciplines. The organization of the school curriculum; schemes advocated; typical recitations, programs, etc. Lectures, readings, reports. Three units; second semester. (Stowell.)

**105. History of Education: Ancient and Medieval.** Beginning with the earliest periods and extending to the period of the Reformation. A study of the development of educational ideals and systems with special reference to the agencies that have been operative in their evolution. Lectures, collateral readings, papers. Monroe's "Text-Book in the History of Education." Open to upper division and to graduate students. Two units; first semester. (McMath.)

**106. History of Education: Modern** (105 continued). From the Reformation to the present, with a critical study of educational classics, especially the contributions of Comenius, Locke, Rousseau, Basedow, Pestalozzi, Herbart, Froebel, Spencer, and contemporary educators. Two units; second semester. (McMath.)

**107. Aesthetics.** This course considers the psychology of Aesthetics; the principles controlling the expression of beauty and their application to the Fine Arts; and a brief history of the Arts with special reference to their importance and effectiveness as educative agencies. Lectures, readings, observations, reports. Two units; first semester. (Stowell.)

**108. School Organization, Administration, Supervision, and Class Management.** A study of the problems of the classroom; the organization and administration of public schools. Lectures, discussions, readings, observations, reports. Open to upper division and to graduate students. Two units; second semester. (McMath.)



**108a. School Organization.** An advanced study of problems which especially concern principals and superintendents. This course presupposes considerable school room experience. Two units; second semester. (Lillard.)

**109a. The Education of Exceptional Children.** This course considers the methods of mental diagnosis and of the treatment of exceptional children. Opportunity to observe actual cases will be offered in the clinic which will be held two afternoons a week in connection with the course. Summer session; two units. (Fernald.)

**112. Interpretation and Expression.** Lectures on methods in the interpretation of literature; the psychology of expression; oral practice of selections from masterpieces; the technique of voice. Open to graduates who are candidates for the teacher's certificate. Two units; first semester. (Yoder.)

**114. Principles of Sociology.** See Sociology 100. Three units; first semester. (Bogardus.)

**120. Immigration.** See Sociology 103. Three units; second semester. (Bogardus.)

**121. Religious Education.** See Religious Education 120, 121. Two units; throughout the year. (Montgomery.)

**122. Current Problems in Education.** A study of existing systems of education with special reference to the underlying industrial and social forces that have determined their development. This course will discuss vocational education and its relation to liberal education; continuation schools; special schools; vocational guidance, etc. It will consist of lectures, discussions, and reports upon the various phases of modern educational theory and practice, with a detailed study of typical schools. Summer session; two units. (Lillard.)

**123. High School Problems.** This course deals with the organization of the high school; the arrangement of the curriculum; election of courses; supervision of study; improvement of teachers in service; articulation of the relation of the principal, teachers, and board of education to each other. The position of the high school will be considered from historical and legal points of view. Two units; second semester. (McMath.)

**124. American Education.** A course in the administration of the public schools. The part played by nation, state, and city; functions of city, county, and state superintendents and boards of education; development and spread of the public school system in America; vocational education; moral education; duties of principal, teacher, superintendent. Discussions, readings and reports. Two units; second semester. (McMath.)

**125. Industrial Education and Vocational Guidance.** This course will include such topics as history and status of industrial education in the United States; lessons from foreign nations; attitude of organized labor; attitude of employers; legislation; industrial surveys; methods of vocational guidance; placement, and employment supervision. Two units; second semester. (McMath.)

**126. California School Problems.** Selected topics in public school administration such as teachers' pensions; school finance; school supervision; vocational education; secondary education; school administration; certification of teachers. Two units; first semester. (McMath.)

**127. School Surveys.** A course in city school administration. The reports of various school surveys will be studied with a view to learning the recommendations of the various experts in educational administration. Two units; first semester. (McMath.)

#### GRADUATE COURSES

**200. Philosophy of Education.** An advanced course in educational theory. It investigates the nature of the psychic activities which make education possible and desirable; the essential nature of the educating process and its limitations; the actual development of this process as seen in the various civilizations. Lectures, discussions, critical study of educational sources. Textbook—Rosenkranz's "Philosophy of Education." Prerequisite, course 101-106. For graduate students. Three units; first semester. (Stowell.)

**201. Philosophy of Education.** An advanced course in educational theory. The possibility of education, its pre-suppositions, its place in human experience, its end; the science, its basis, its certitude; the philosophy of education, the

sources of its materials; the meaning of institutions, their contributions to the philosophy of education; a liberal education, its essence, its efficiency; culture, its characteristics, its relation to the curriculum; the tests of college efficiency. Lectures, discussions, readings, papers. Primarily for graduate students. Three units; second semester. (Stowell.)

**202. Practice in Teaching.** The University High School, located on the University Campus, furnishes rare facilities for observation and for actual experience in handling and giving instruction to classes in Secondary Education. Five hours; one semester.

**203. Secondary Education.** This course considers the origin, growth, organization, administration, supervision, and management of the American high school; the modern conception of its relation to the elementary school, to higher institutions of learning, and to the community; formal discipline, adolescence, moral education, vocational education, social organizations, and the curriculum.

It is designed primarily to meet the needs of candidates for the high school certificate. Two units. (Lillard.)

**204. Administration of National School Systems.** Administration, organization, curricula, and methods of teaching in German, French, and English schools, including elementary, secondary, and higher schools. A comparative study. Three units; first semester. (McMath.)

**205. School Supervision.** A study of typical courses of study of various cities; a discussion of the teaching of various subjects of the curriculum; lesson plans; standard tests; methods of promotion, gradation, and classification of pupils. This course is intended especially for students who aspire to become city or county superintendents. Two units; first semester. (McMath.)

**Undergraduate Major Work:** Thirty semester units. The following courses are required: 103, 104 or 123, 105, 106, 108 or 108a, and one Teachers' Course (if offered), the balance elective.

**Requirements for the Degree Master of Arts:** Major in Education. In addition to the Undergraduate Education Major, the graduate units must include Courses 200 or 201, 204, 203 or 205.

**For Special Courses in Education**, see the several departments, as follows:

- Teachers' Course in Botany, see Botany 106.
- Teachers' Course in Chemistry, see Chemistry 217.
- Teachers' Course in English, see English 295.
- Teachers' Course in French, see French 111.
- Teachers' Course in German, see German 211.
- Teachers' Course in History, see History 220.
- Teachers' Course in Latin, see Latin 113.
- Teachers' Course in Mathematics, see Mathematics 210.
- Teachers' Course in Physics, see Physics 206.
- Teachers' Course in Spanish, see Spanish 214.
- Teachers' Course in Zoology, see Zoology 211.

**Teachers' Courses**, even when taken in graduate standing, cannot be included as part of the work for the Master's degree.

**Special Summer Courses** will be offered in Education; see Announcement of the Summer School.

## ENGINEERING COURSES ELECTIVE IN ARTS

The following courses in engineering are open to students in the College of Liberal Arts, but not more than a total of 18 units may be counted toward the degree of Bachelor of Arts. These courses may also be offered by engineering students seeking credit in the department of Liberal Arts, but in such transfer of credits not more than 18 units will be accepted for any one semester's work.

	Units
Drawing (4 and 5).....	4
Descriptive Geometry (Drawing 6).....	4
Surveying (C. E. 1 and 2).....	6
Analytical Mechanics (C. E. 107).....	5
Sanitary Engineering (C. E. 112).....	2
Materials of Construction (C. E. 13).....	3
Dynamo Machinery (E. E. 101ab).....	10
Dynamo Laboratory (E. E. 102).....	2
Steam Engineering (E. E. 4 and 5).....	4
Alternating Currents (E. E. 103a).....	5



**ENGLISH LANGUAGE AND LITERATURE**

ALLISON GAW, PAUL S. WOOD, BENJAMIN F. STELTER, JAMES  
MAIN DIXON, Professors

ELIZABETH YODER, Associate Professor

M. PAULINE SCOTT, MARYETTE G. MACKEY, Assistant Professors  
WILLIAM CHISLETT, MARION HELM, DAISY M. AUSTIN,  
Assistants

**1. Introductory Course.** Practice in composition, based upon a study of representative works in English literature. Required of all candidates for the bachelor's degree. Three units; throughout the year. (Gaw, Wood, Stelter, Scott, Mackey, Chislett, Austin.)

**1b.** Training in spelling and punctuation; for students failing to pass a test in those subjects. No credit is given for 1b, but it must be passed before a student receives credit for English 1. One hour; each semester. (Helm.)

**10. Argumentation and Debate.** A course in practical Argumentation and Debate. The main objects are the training of students in the analysis of questions, the writing of briefs and preparation of debates, and the effective delivery of arguments upon the platform. This class will form the nucleus from which the debating teams will be chosen to represent the University in the various annual intercollegiate debates. Two units, first semester.

**20. General History of English Literature.** Required of all students intending to do major work in English, and in general prerequisite to all courses in literature above Sophomore grade. Three units; throughout the year. (Stelter, Scott.)

**50. Types of Literature.** An introduction to the study of literature, with emphasis upon the various literary types in prose and verse. Two units; throughout the year. (Mackey.)

**62. History of the Short Story.** A study not only of the historical development, but also of the technique and the literary appreciation of the short story. Two units; second semester. (Scott.)

**63. Studies in the Modern Novel.** An analytical study of representative English, French and Russian novels. The work of the first semester is mainly concerned with the romance of action; that of the second with the novel of character. Two units; throughout the year. (Wood.)

**70. Great Books and Their Writers.** A study of the authors' personal viewpoints and their solutions of the prob-



lems of life. The course includes selected works of Galsworthy, George Eliot, Thackeray, Arnold, Browning, Scott, Johnson, Swift, Milton, and Shakespeare. Three units; first semester. (Scott.)

**98. Public Lecture Course. Contemporary Literature.** Popular lectures on contemporary poetry and prose, with illustrative readings. Admission and credit as in Course 99. One unit; second semester. (Wood.)

**99. Public Lecture Course. Modern Plays.** Readings and interpretations of recent dramas. One unit of credit, granted upon passing an examination on the lectures and required reading, will be given to regular undergraduate students above Freshman grade. Open to the public without charge. Not offered 1916-17. One unit; second semester. (Gaw.)

#### UPPER DIVISION COURSES

**Note**—Many of the following courses may also, under certain conditions, be elected by graduate students for graduate credit; but such arrangement is invariably dependent upon the details of the student's previous preparation and upon the satisfactory completion of a piece of research in addition to the regular work of the course. For the possibility of such adjustment in any given case the student will consult with the head of the department.

**103. Advanced Composition.** Narrative and descriptive writing; the short-story. The class is limited to fifteen persons, of whom a small proportion may be Sophomores. Prerequisite, a high grade in English 1. Two units; first semester. (Wood.)

**110. Introduction to the Study of Language.** The progressive and conservative forces entering into linguistic evolution and differentiation; the relations of English to the other members of the Indo-European group; the general history of the English language in England. Open to Sophomores with adequate preparation. Three units; second semester. (Gaw.)

**112. Old English.** A study of the grammar and phonology of West Saxon English prior to the Norman Conquest, with emphasis upon its relations to the English of today. Required of all English majors. Three units; throughout the year. (Gaw.)

**121. The Early English Period.** A study of English literature from its origins to 1066. Prerequisite, English 112. Not offered, 1916-1917. Three units; second semester. (Gaw.)

**122. Beowulf.** A reading of selected passages, with critical comment. The course is primarily literary, not philological. Prerequisite, English 112. Not offered, 1916-1917. Two units; second semester. (Gaw.)

**126. The Period of Chaucer.** A survey of Chaucer's life and times; readings principally in the "Canterbury Tales" and "Troilus and Cressida." Three units; second semester. (Stelter.)

**129. Non-Dramatic Literature of the Elizabethan Period.** 1557-1660. A study of the principal authors and types of non-dramatic literature of the period. Chief attention is given to Spenser. Two units; first semester. (Stelter.)

**Note**—For Elizabethan Dramatic Literature see courses 154, 154b, 154c, and 156.

**133. The Period of Milton.** Milton's poetry and most important prose. Selections from the Church poets, Cavaliers, and prose writers of the period. Three units; second semester. (Stelter.)

**135. The Classical Period.** 1660-1760. Dryden, the Augustans, Johnson and his circle, the evolution of journalism, deism, the rise and decline of Neo-Classicism. Two units; throughout the year. (Wood.)

**137. The Romantic Period.** 1760-1832. Chief attention is given to Wordsworth, Coleridge, Byron, Shelley, and Keats. Three units; first semester. (Stelter.)

**137a. The Prose of the Romantic Period.** Two units; second semester. (Stelter.)

**140. The Victorian Period.** 1832-1892. Chief attention is given to Tennyson, Browning, Carlyle, Newman, Ruskin, Arnold, the Pre-Raphaelites, and Swinburne. Not offered, 1916-1917. Three units; second semester. (Wood.)

**143. Contemporary British and American Poets.** A consideration of the chief writers of verse in the English language since the death of Tennyson. Two units; second semester. (Wood.)

**145. American Literature.** A survey from the beginning to the present day. A careful study of Colonial and Revolutionary writing is used as the basis for a consideration of the chief Nineteenth Century productions. Throughout the course, especial attention is paid to the relations between American and British literature. Two units; throughout the year. (Wood.)

**149. Scottish Literature.** A survey from the fourteenth to the nineteenth centuries; with readings in Barbour's "Bruce," the "Kingis Quair", Dunbar, Douglas, Ramsay, Ian Maclaren and Barrie. Not offered, 1916-1917. Two units; second semester. (Dixon.)

**154. Shakespeare.** Analytical study of a series of Shakespeare's plays in chronological order, in the light of English dramatic history and the contemporary social conditions. Not offered, 1916-1917. Three units; first semester. (Gaw.)

**154b. Shakespeare's Historical Plays.** For description of this course see Department of History, course 102. Two units; one semester each course. (Dixon.)

**154c. Shakespearean Tragedy.** A detailed study of four of Shakespeare's tragedies. Prerequisite, course 154. Two units; second semester. (Stelter.)

**156. The English Drama Before 1642, exclusive of Shakespeare.** The development of drama from its origins in the church liturgy to its suppression by the Puritans. Not offered, 1916-1917. Three units; second semester. (Gaw.)

**158. The Modern Drama.** The history of the English drama from 1660 to the present day, with especial emphasis upon the influence of Ibsen. Three units; throughout the year. (Gaw.)

**160. The English Lyric.** A study of the lyric as a form, with a survey of the leading types in English. Not offered, 1916-1917. Two units; one semester. (Stelter.)

**166. The English Essay.** A study, historical and critical, of the essay as a literary form from Bacon to the present time. Not offered, 1916-1917. Two units; one semester. (Stelter.)

**177. Bunyan.** A study of the life and works of the Puritan allegorist and idealist. Two units; first semester. (Dixon.)

**180a. Burns.** A study of the central figure of modern Scottish lyrical poetry and his literary environment. Two units; second semester. (Dixon.)

**181. Studies in the Romantic Poets.** Prerequisite, English 137. Not offered, 1916-1917. Two units; throughout the year. (Stelter.)

**182a. Scott as an Historical Novelist.** Special attention is given to "Old Mortality", "Rob Roy", "Waverley", and "Guy Mannering." Not offered, 1916-1917. One unit; one semester. (Dixon.)

**183a. Tennyson.** The poet as lyricist and as interpreter of his age, with special attention to "In Memoriam." Not offered, 1916-1917. Two units; second semester. (Dixon.)

**183c. Browning.** A study of the art and teaching of Robert Browning, with especial attention to "The Ring and the Book." Two units; second semester. (Wood.)

**183e. Matthew Arnold.** The poet and critic as the exponent of Oxford ideals; humanist, elegiast, Neo-Hellenist. Not offered, 1916-1917. One unit; second semester. (Dixon.)

**184a. Carlyle.** His influence on his contemporaries and on nineteenth century ideals, with especial attention to "Sartor Resartus." Not offered, 1916-1917. One unit; one semester. (Dixon.)

**184b. Ruskin.** His ethical, esthetic, and economic teachings. Not offered, 1916-1917. Two units; first semester. (Dixon.)

**190. Principles of Literary Criticism.** A comprehensive study of the fundamentals of literature, with revision of theories and discussion. Not offered, 1916-1917. Two units; one semester. (Dixon.)

**193. English Translations of the Classics.** The Greek masterpieces are emphasized; translations from the Latin are chosen for the bearing of the original works upon English literature; selections are included from Dante. Two units; either semester. (Stelter.)

**197. Oral Interpretation.** For description of the course see Education 112. This course is required of all English major candidates for the High School Teacher's Certificate who are not already satisfactorily equipped in this respect. Such candidates are advised to satisfy the requirement in their senior year. Open only to Seniors preparing for teaching or to graduate students. Two units; first semester. (Yoder.)

GRADUATE COURSES

**217. Northern Middle English.** The "Kingis Quair"; the poems of Henryson and Dunbar. Not offered, 1916-1917. Three units; second semester. (Dixon.)

**224. Early Middle English Literature.** A study of typical literary forms between 1100 and 1350. Not offered, 1916-1917. Two units; second semester. (Gaw.)

**255. The Early Popular Drama.** An intensive study of the scriptural, allegorical, and comedy elements in the drama preceding the Shakespearean period. Not offered, 1916-1917. Two units; second semester. (Gaw.)



**264. The History of the Novel.** The development of the European novel, with especial attention to its production in England. Two units; throughout the year. (Wood.)

**291. Theories of Poetry.** A study of the chief theories of poetry and the types of poetic literature, with illustrations drawn mainly from the English poets. Two units; throughout the year. (Stelter.)

**294. The English Seminar.** Subject for 1916-17: The Popular Ballad. One unit; throughout the year.

**295. The Teaching of English.** A study of the problems, methods, materials, and bibliography. Required of all candidates for the High School Teacher's Certificate offering English either as major or minor. Graduate course, but not credited toward the degree of Master of Arts. Three units; first semester. (Gaw.)

**Advisers.** For advice concerning the various details of their work (including thesis) graduate students electing English as major subject, and English major seniors who are prospective candidates for the High School Teacher's Certificate, will confer with the head of the department. Each undergraduate English major student will, at the beginning of the sophomore year, choose a permanent adviser from among the three chief members of the English faculty.

**Undergraduate Major Work.** Thirty semester units, in addition to English 1. In major work in English all students must include courses 20 and 112. Those who contemplate pursuing graduate work for the attainment of the degree of Master of Arts are notified that their undergraduate course must be so planned as to equip them with a reading knowledge of Greek, Latin, French, or German.

**Minor Work.** Ten semester units in addition to course 1.

Each candidate for the department's recommendation for the bachelor's degree is expected to be able to interpret orally, with ease and effectiveness, moderately difficult passages of modern English verse and prose. To this end students doing major work in English should early in the course avail themselves of the privilege of electing courses in the College of Oratory. This statement applies with especial force to prospective teachers.

Undergraduate students who contemplate the teaching of English should by all means notify the head of the depart-



ment of that fact at the beginning of the senior year. Failure to do so may entail complications that will render it impossible for them to secure the Certificate in the minimum time.

**Requirements for the High School Recommendation.** An undergraduate English major course, followed by a minimum of eight graduate units in the English department. The course as a whole must include courses 20, 110, 112, a period course (see courses 121 to 149), 197 and 295. In addition the candidate must creditably pass the "English final examinations for graduates", as described below.

**Requirements for the Degree of Master of Arts.** A satisfactory undergraduate English major course, followed by a graduate course organized as prescribed in the general regulations for the degree of Master of Arts (which see), and compliance with the requirements concerning the "English final examinations for graduates", as indicated below. Candidates for the degree of Master of Arts in English are also required to offer a reading knowledge of Greek, Latin, German, or French.

**The English Final Examinations for Graduates:** In addition to the regular course examinations there will be required of all English major candidates for the degree of Master of Arts or for the High School Teacher's Recommendation a more comprehensive test of their fitness for the honors in question. This will require of the candidate evidence of a scholarly attitude of mind and an habitual use of scholarly methods no less than a firm grasp of the subject-matter involved. The equipments required are:

1. Familiarity, obtained at first hand, with the chief masterpieces of English literature, with the history of its development, and with the methods of historical study.
2. Satisfactory special knowledge of one of the main literary periods or movements or types.
3. The ability to apply to a literary work of art of any of the well recognized types, the standard criteria, constructive, metrical, and stylistic.
4. A scholarly acquaintance with the methods of linguistic study and with the history of the development of the English language through its three main periods.
5. Skill in organizing and presenting thought orally and in writing.

The above examinations are conducted once every semester and must be taken at some time during the academic year at the end of which the degree or certificate in question is to be granted. Candidates for the Teacher's Certificate must pass with "recommended grades" in each of the five divisions specified. Candidates for the degree of Master of Arts must show high merit in each of the five divisions. In lieu of divisions 2 and 4 the candidate may offer final examinations in advanced courses covering material of the nature described, which examinations shall have been taken at this University within the same academic year.

### FRENCH

EDGAR M. VON FINGERLIN, LAWRENCE M. RIDDLE, Professors  
EVA F. DE KERPEZDRON, PEARL BLANCHE FISHER, Instructors

#### LOWER DIVISION COURSES

1. **Elementary French.** Grammar, elements of phonetics, reading of French texts. Outlines of French political history of the nineteenth century. Five units; throughout the year. (Riddle and de Kerpezdron.)

2. **Modern French.** Selections from Chateaubriand, Hugo, Dumas, Sand, Balzac, Daudet, Zola, Flaubert. Outlines of French literature of the nineteenth century. Composition. Three units; throughout the year. (Riddle.)

#### UPPER DIVISION COURSES

106. **French Literature of the Seventeenth Century.** A general survey with special attention to Corneille, Racine, and Molière. Offered 1917-1918. Two units; throughout the year. (Riddle.)

107. **French Literature of the Eighteenth Century.** A general survey with special attention to Montesquieu, Voltaire, and Rousseau. Offered 1918-1919. Two units; throughout the year. (Riddle.)

108. **French Lyric Poetry of the Romantic School.** Lamartine and Hugo. Interpretation of Romantic poetry according to such methods as those suggested by Roustan, "Précis d'explication française;" Rudler, "L'Explication française." One unit; second semester. (Riddle.)

109. **Advanced French Composition.** Prerequisite, course 2. One unit; throughout the year. (Von Fingerlin.)

**110. French Conversation.** Students are divided into sections of not more than ten each. Each section meets twice a week. Throughout the year, one unit a semester. (De Kerpezdron and Fisher.)

**111. Teachers' Course.** The methods of teaching and the finer points of the language. While primarily intended for teachers, the course is open also to those who have finished course 106 or 107. Two units; second semester. (Von Fingerlin.)

#### GRADUATE COURSES

**221. French Seminar.** Studies in French literature. Two units; throughout the year. (Riddle.)

**222. French Literature of the Renaissance.** Special attention is given to Rabelais, Ronsard, and Montaigne. Offered 1918-1919. Two units; throughout the year. (Riddle.)

**223. French Drama of the Seventeenth Century.** First semester: Corneille and Racine; second semester, Molière. Offered 1917-1918. Two units; throughout the year. (Riddle.)

**224. French Phonetics.** The principles of phonetics in their application to French pronunciation. Passy-Rambeau, "Chrestomathie phonétique." Two units; throughout the year. (Von Fingerlin.)

**225. Reading of Old French Texts.** "La Chanson de Roland," "Aucassin et Nicolette," and selections from Bartsch-Wiese, "Chrestomathie de l'ancien français." One unit; throughout the year. (Riddle.)

**226. French Phonology and Morphology.** Three units; throughout the year. (Von Fingerlin.)

**Major Work:** Thirty units, including courses 2, 106, 107, 109 and 110. The student must also pass an examination in the history of French literature.

**Minor Work:** Ten units exclusive of course 1 and including courses 2 and 109.

**High School Teacher's Recommendation:** The requirements for major work, course 111, and a minimum of seven graduate units, including the seminar. The candidate must also pass an oral and a written examination in French syntax and French pronunciation.

**GEOLOGY**

GILBERT E. BAILEY, Professor

## LOWER DIVISION COURSES

**1. Physiography.** A study of the surface features of the earth and their relations to human life and industries. Lectures and recitations. Two units; one semester.

The course deals with subjects which are intermediate between Geology, on the one hand, and History, Sociology, Political Economy, and Biology on the other.

**2. Mineralogy.** A study of the properties, uses, and methods of determination of the most important minerals, ores, and gems. Laboratory, recitations, and lectures. Prerequisite, Chemistry 2 or its equivalent. Two units; throughout the year.

**3. Ores and Metals.** Course 2 in the Department of Chemistry.

## UPPER DIVISION COURSES

**104. Commercial and Economic Geography.** A study of the effect of soil, climate, and geographical situation in determining the character of national industries and of international trade, commercial routes, seaports, exports and imports. An analysis of the fundamental natural factors necessary for man's economic progress. Prerequisite, Geology 1 or its equivalent. Two units; second semester.

**105. General Geology.** Lectures, laboratory and field work, with special attention to the geology of the Pacific Coast region. Two units; both semesters.

**106. Agricultural Geology.** Lectures on the origin, composition, classification and naming of soils; control of aeration and moisture condition; physical analysis of soils. Open to all classes. Two units; both semesters.

**107. Applied Geology.** The application of geology to oil, mining and minerals. Field work and study of the mineral resources of the State and their use. Two units; both semesters.

**108. Agronomy. The Essentials of Agriculture.** Lectures on methods of cultivation of the different types of soils; effect of tillage; soil hygiene; adaptation to crops; fertility of soils; fertilizers. Two units; first semester.



## GERMAN

MARGARET GRAHAM BORTHWICK. Professor

BERTHA J. JACOBY-KIENLE, MYRTLE EMILY BILES, Associate Professors

### LOWER DIVISION COURSES

**1. Elementary German.** Pronunciation, reading, and grammar, with practice in speaking and writing German. This course is intended for students who enter without German. It includes the essentials of German grammar, with various practical exercises in dictation, composition, translation at hearing, and oral and written reproduction. During the second semester some interesting short stories and characteristic poems are studied. Five units; throughout the year. (Kienle.)

**Note**—German 1 cannot be credited toward the required number of units for either major or minor work in German.

**2. Modern German.** Modern narrative and dramatic prose, selected poems, and one drama of Schiller or Lessing. Grammar continued, with written and oral exercises. Composition once a week. Collateral readings. For students who have had course 1, or two years of high school German. Three units; throughout the year. (Borthwick, Kienle, Biles.)

**3. German Conversation.** This course is designed to make the student familiar with common expressions that occur in every day life. Conducted entirely in German. For those deficient in the oral use of the language. To follow or accompany German 2. Two units; throughout the year. (Biles.)

**4. Scientific and Journalistic German.** Rapid reading of scientific prose and leading articles in German newspapers as found in Prehn's "Journalistic German" and current German periodicals. For students specializing in science. Open to those who have had course 2, or its equivalent. Two units; throughout the year. (Biles.)

### UPPER DIVISION COURSES

**103. Schiller.** Study of Schiller's life and works. Class reading and interpretation of dramas and poems. Collateral readings. Practice in composition. Open to students who have had course 2, or its equivalent. Three units; first semester. (Biles, Kienle.)



**104. Modern Historical Prose.** Historical novels, and speeches by prominent statesmen relating to important periods in the history of Germany, such as the Reformation, the times of Frederick the Great, and the nineteenth century, with collateral readings in history. Composition continued. Three units; second semester. (Biles.)

**105. Grammatical Review.** A systematic review of grammar. Exercises in composition and conversation. Introduction to Vietor's system of phonetics, with exercise in reading phonetic texts and in pronunciation. Open to those taking any course beyond 104. Two units; throughout the year. (Borthwick.)

**106. Heine.** Study of Heine's life and works. Lyrics; "Harzreise" and other prose writings. Collateral readings. Composition continued. Open to those who have had course 104, or its equivalent. Three units; first semester. (Biles.)

**107. Goethe.** Study of Goethe's life and works. Readings from "Aus meinem Leben," "Egmont," and "Tasso." Collateral reading and practice in composition. Three units; second semester. (Biles.)

**116. Outline of German Literature.** The development of German literature from the earliest fragmentary rhymes through the popular-epics and court-epics to the lyrics of the thirteenth century. Conducted in German. Collateral reading in modern German. Two units; first semester. (Borthwick.)

**117. Outline of German Literature** (continued). From the fourteenth century to modern times. The folk-songs, the critical writers, the romanticists, and the nineteenth century dramatists. Two units; second semester. (Borthwick.)

**128. Nineteenth Century Readings.** Representative dramas and novels from Grillparzer, Hauptmann, Freytag, and Schefel. Three units; first semester. (Biles.)

**129. Goethe's Faust.** Interpretation and discussion of both parts, with a short historical introduction, and collateral reading of Marlowe's "Faust" and of the "Puppenspiel." Three units; second semester. (Biles.)

#### GRADUATE COURSES

**209. German Literature of the Nineteenth Century** and its relation to the historical events and to the cultural and social

development of the time. Both the history and the literature are studied, with collateral reading and reports in German of the works read. The earlier and later romanticists and the patriotic poets. Three units; first semester. (Borthwick.)

**210. German Literature of the Nineteenth Century** (continued). As above. The dramatists of the middle and of the latter half of the century. Three units; second semester. (Borthwick.)

**211. Teachers' Course.** A course in the teaching of German. Discussion of methods. Reading of textbooks in common use. Practice in the application of phonetics to the teaching of pronunciation. Two units; first semester. (Borthwick.)

**212. Advanced Composition.** Intended primarily for teachers whose major or minor is German. The course gives practice in writing idiomatic German. Translations from English into German. Original themes. Colloquial practice. Two hours; second semester. (Borthwick.)

**222. Lessing.** Study of Lessing's life. Selections from his dramas and prose writings. Special attention paid to his critical works, and their service to German literature. Three units; first semester. (Borthwick.)

**223. Middle High German.** Introductory Grammar. Selections from the "Nibelungen Lied" and "Armer Heinrich." Not offered, 1917-1918. Three units; second semester. (Borthwick.)

**224. Modern German Novel.** A study of the German novel from 1850 to the present time. Chief attention is given to the works of Fontane, Stifter, Raabe and Freytag. Three units, second semester. (Borthwick.)

**Major Work:** Thirty semester units, exclusive of course 1, and including courses 105, 107, 116, 117 and 129.

**Minor Work.** Ten units exclusive of course 1, at least four of which must be in upper division work.

**High School Teacher's Recommendation:** Thirty semester units, exclusive of course 1, and including courses 103, 105, 107, 116, 117; also a minimum of seven graduate units; including 211. Each candidate must pass an oral and written examination in German grammar, reading and class-room conversation.

**The Degree of Master of Arts:** The German departmental requirements for this degree include: The full undergraduate major course; a minimum of eight graduate units, exclusive of 211; and a final examination, both oral and written, on the history of German literature in general and on some period in which the candidate has done intensive work.

## HISTORY

TULLY C. KNOLES, ROY MALCOM, ROCKWELL D. HUNT, JAMES MAIN DIXON, FRANK J. KLINGBERG, Professors; LESLIE F. GAY, JR., Associate Professor

### LOWER DIVISION COURSES

1. **English History**, with special reference to social and literary development. Textbook, supplemented by lectures, reports and collateral reading. Two units; throughout the year. (Klingberg.)

2. **Social and Political History of Modern Europe**. A course covering the field of European History from the fifteenth century to the present time. Designed for the purpose of giving a general survey of the development of society, politics, science, and literature. Three units; throughout the year. (Klingberg.)

5. **Greek History**. A survey of Greek history from the earliest times to the death of Alexander the Great. Lectures, readings, and reports. Three units; first semester. (Gay, Knoles.)

6. **Roman History**. A course covering the development of Rome from the foundations of the city to the close of the fourth century A. D. Lectures, readings, and reports. Three units; second semester. (Gay, Knoles.)

7. **Mediaeval History**. A general survey of the mediaeval period, with special reference to the development of great institutions, both of church and state. Discussions on mediaeval conceptions. Lectures, readings, and papers. Three units; both semesters. (Gay, Knoles.)

13. **History of the United States, 1787-1850**. A study of the development and history of national life in the United States from 1787 to the Compromise of 1850. Lectures and special investigations. Considerable attention is paid to the development of political parties. Three units; first semester. (Malcolm.)

**13a. History of the United States, 1850-1912.** A continuation of course 13 from the Compromise of 1850 to the present time. Special attention paid to the period of reconstruction, and to the fields of political and economic development. Lectures, reports, and investigations. Three units; second semester. (Malcom.)

UPPER DIVISION COURSES

**101. History of England and Greater Britain.** A course covering the development of British history with special emphasis on the growth of the Empire. See Political Science 106. Two units; throughout the year. (Klingberg.)

**102. English History in Shakespeare.** (a) The Lancastrian Tetralogy; "Richard II"; "Henry IV," 1 and 2; "Henry V." (b) The Yorkist Tetralogy; "Henry VI," 1, 2, 3; "Richard III." (c) "King John" and the days of Magna Charta. (d) "Henry VIII" and the English break with Rome. (e) British Legendary History: "Cymbeline," "Lear." The various sections are given in successive semesters. Two units; either semester. (Dixon.)

**103. Scottish History.** (a) Scotland in the sixteenth century, with special attention to Scott's "Lady of the Lake." (b) Celtic Scotland, with special attention to Shakespeare's "Macbeth." Three units; first semester. (Dixon.)

**104. Political Institutions of the American Colonies.** A study of the political life and institutions of the thirteen American colonies. Special attention given to the theories and practice of local government. Two units; throughout the year. See Political Science 108.

**105. Church History.** A course intended primarily for students in the College of Theology; it covers the entire field of the development of the mediaeval church, and the growth of the modern denominations. Two units; throughout the year. (Knoles.)

**108. Renaissance.** A study of the Renaissance as it affected European life and thought, with special reference to artistic, literary, and political features. Open to well qualified Sophomores. Two units; first semester. (Klingberg.)

**109. The Reformation.** A study of the Reformation as it affected the religious, economic, and political development of Europe. Open to well qualified Sophomores. Two units; second semester. (Klingberg.)



**110. The French Revolution and the Napoleonic Empire, 1789-1815.** A brief review of the Ancient Regime, followed by a study of the political, social, and international aspect of the French Revolution and the Napoleonic Empire. Three units; second semester. (Klingberg.)

**111. Europe Since the Congress of Vienna.** A course covering the development of Europe from the close of the Napoleonic Wars to the present time. Two units; throughout the year. (Klingberg.)

**112. Asiatic Studies.** (a) The founding of British Rule in Hindustan, with special attention to the careers of Clive and Hastings. (b) The Spanish Conquest and Government of the Philippines and the recent American Occupation. (c) The Portuguese in Asia, with special attention to the epic of Camöens, "The Lusiads." (d) Mohammedan India, with special attention to the career and policy of Akbar. Each two units; both semesters. (Dixon.)

**113. China.** See Oriental Studies, No. 105.

**114. English Constitutional History.** An examination into the origin and the evolution of the English Constitution. Lectures, readings, and reports. Prerequisite, course 1 or 2. Not offered in 1916-17. Two units; throughout the year. (Klingberg.)

**115. English Economic and Social History.** A course covering the economic and social history of England from the earliest times to the present. Prerequisite, course 1 or 2. Three units; first semester. (Klingberg.)

**116. Pacific Slope History.** A special lecture course, beginning with the Spanish Colonial system. The origin of civilization in New Spain; the occupation and development of Alta California and the Oregon territory; the American conquest; the genesis of the Empire State of the Pacific. Special reference to California throughout. This course is designed to be especially helpful to history teachers and those expecting to teach history. Two units; throughout the year. (Hunt.)

**117. The Expansion of Europe Since the Fifteenth Century.** European discoveries, explorations, and settlements in America, Asia, Africa, and Australia. The rivalries of European powers, the growth of colonies, and the development of colonial systems and institutions. Two units; throughout the year. (Klingberg.)



**118. Parties and Governments in Europe.** See Political Science 101.

**119. Greek History.** A critical study of the conditions of Greek life and thought, making a careful study of the evolution of political and social institutions. Lectures, papers on assigned subjects for research. Open only to advanced students and teachers. Two units; first semester. (Knoles.)

**120. Roman History.** A series of investigations into the genesis, growth, and organization of the Roman State with especial emphasis upon the later Republican and early Imperial periods. Lectures, readings, papers on assigned subjects for research. Open only to advanced students and teachers. Two units; second semester. (Knoles.)

**125. Ancient Semitic History.** This course deals primarily with the history of the Semitic peoples of the Tigris-Euphrates Valley, Arabian Peninsula and Asia Minor. A careful study is made of the political, religious and social institutions, and their relation to modern civilization. The nations studied include the Sumerians, Assyrians, Babylonians, Armeans, Arabians, Hebrews and some minor groups. Some note is also taken of Egyptian and Persian history where necessary. Two hours; throughout the year. (Knopf.)

**130. History of Latin-America.** A general survey of the political, social, and industrial development of the leading states of Latin-America. Lectures, reports, and investigations. Three units; throughout the year. (Gay.)

**135. Latin-American Government.** See Political Science 115.

**201. Historiography.** A critical and comparative study of the leading historians, chiefly of the nineteenth century, their materials, methods of investigation and presentation, with a general consideration of the development of modern historical writing. One unit; throughout the year. (Klingberg.)

**216. American Government.** See Political Science No. 200.

**220. Teachers' Course.** A course for those who are planning to secure a High School Teachers' Recommendation. A discussion of the teaching of history in secondary schools, including criticism of textbooks and the uses of the library for high school students. Two units; either semester. (Knoles.)

**222. The History Seminar.** The purpose of the Seminar is to improve the method of study of history; to give training in historical method and criticism; to assist students in doing constructive work. As a guide to the study of method, Langlois & Seignobos' "Introduction to the Study of History" is used. In 1916-17 the major portion of the time was given to the study of British-American Relations During the French Revolutionary period. Each student must show ability to do thorough research work. Two units; throughout the year.

**Major Work:** Thirty semester units, one-half of which must be in upper division courses.

**Minor Work:** Ten units, including at least four in upper division courses.

**High School Teachers' Recommendation:** Six units each of Ancient, Mediaeval, Modern, English, and American History, courses 216 and 220.

## ITALIAN

EDGAR M. VON FINGERLIN, Professor

### LOWER DIVISION COURSES

1. **Italian Grammar.** Readings from Modern Writers. Goldoni's Comedies, Composition. Three units; throughout the year.

2. **Romanticism and Pessimism.** Alessandro Manzoni, Giacomo Leopardi, Silvio Pellico. Two units; throughout the year.

### UPPER DIVISION COURSES

100. **Dante, Petrarca, Tasso.** Literature: Italian Patriots as Writers. Two units; both semesters. Throughout these courses the Italian Language will be used as much as possible with particular emphasis upon the Roman pronunciation.

## JOURNALISM

BRUCE BLIVEN, JAMES M. DIXON, FESTUS E. OWEN, Professors;  
ERNEST J. HOPKINS, Associate Professor; CHARLOTTE M. BROWN, JESSE R. MILLER, FRANK J. BAUM, Instructors.

1. **News and Newswriting.** What constitutes news; its collection, writing and editing. The work of the reporter, his qualifications. Types of news stories, features and special articles, editorials and paragraphs; special correspondence;

interviews, literary, artistic and dramatic criticism. One lecture and four or eight laboratory hours each week. Three or five units; first semester. (Bliven.)

**2. Organization of the Newspaper.** The rise, growth and present position of the newspaper; its organization and operation; editorial positions; syndicates, bureaus, press associations. The newspaper as a social force. Prerequisite, course 1. Three or five units; second semester. One lecture and four or eight laboratory hours each week. (Bliven, Hopkins.)

**3. Copyreading and Headlines.** The establishment and maintenance of a style sheet; punctuation, capitalization, abbreviation. Rewriting of copy, condensation and expansion. The writing of headlines. Prerequisites, courses 1 and 2. Two units; first semester. Not given, 1917-18. (Bliven.)

**4. Editing and Makeup.** A continuation of course 3, including problems of makeup, typographical style, news values and display. Liberal practice in the handling of copy; the preparation of dummy pages. Prerequisite, course 3. Two units; second semester. Not given, 1917-18. (Bliven, Hopkins.)

**5. Advertising as a Business Force.** The theory and practice of business publicity. The relation of advertising to manufacture and to merchandising. Preparation of an advertising campaign, including preliminary investigation, formulation of sales plan, and preparation of copy. The various advertising media and their relation to one another. Two units; first semester. (Baum.)

**6. The Writing of Advertising.** The preparation of copy and layouts; relation of copy to illustration; newspaper and magazine advertising; booklets, circulars, form letters, street car cards and billboards. Checking and testing copy. The duties of an advertising manager, agent and solicitor. The mechanics of advertising; type, paper, engraving and printing processes. Prerequisite, course 5. Two units; second semester. (Baum.)

**7. Newspaper Principles and Problems.** A consideration of current newspaper problems, based in part on the study of well known American journals. Frequent lectures by noted journalists. One unit; second semester. (Bliven, Hopkins.)

**8. Typography and Printing.** A laboratory course in the mechanics of printing, with occasional lectures. Setting type,

making up, printing, folding and binding. The history of the printing press; study of type faces, harmony in display, title pages, composition of advertisements. One unit; either semester. Not given, 1917-18. (Miller.)

**9. Reference and Bibliographic Course.** Training in methods and materials used in research. The course covers the study of standard reference works, such as encyclopedias, dictionaries, annuals, periodicals, periodical indexes and general reference books on all subjects. Special attention is given to methods of investigation of a subject in the library, and practical work is done by each student in subject bibliographies. Either semester; one unit. (Brown.)

**10. Newspaper Advertising.** The origin, growth and development of newspaper advertising. Advertising rates, and their relation to circulation. Duties of the advertising manager; solicitation of local and foreign advertising; the advertising agency and the newspaper service bureau. Students will use "The Trojan" as a means for laboratory work. Two units; first semester. (Baum.)

**11. Newspaper Administration.** The business aspect of the newspaper, particularly the country press. Newspaper records and business systems; cost-finding. Newspaper promotion; circulation building. Lectures and laboratory work. Two units; second semester. (Baum.)

#### UPPER DIVISION COURSES

**100. Advanced News and Feature Writing.** Special forms of writing for newspapers and other periodicals. Rapid writing of feature stories and special articles. Discussion of the magazine market and its tendencies. Prerequisites, courses 1 and 2. Two units; first semester. (Bliven.)

**101. The American Periodical.** The origin, rise and development of the magazine in America. Present day tendencies; the trade journal; the technical press. Typical examples of class publications will be studied. Prerequisite, course 100. Two units; second semester. (Bliven.)

**102. Current News and the Editorial.** A study of the functions of the editorial writer and his methods of work. News sources and their relative reliability. The events of the day will be made the basis of editorial interpretation. News reports in various publications will be compared. Prerequisites, courses 1 and 2. Two units; first semester. Not given, 1917-18. (Bliven.)



**103. Interpretation of News Values.** A continuation of Journalism 102. Weekly summaries of the world's events will be prepared and topics selected for editorial treatment. Students will compare their work with editorials in representative American journals. Prerequisite, course 102. Two units; second semester. Not given, 1917-18. (Bliven, Hopkins.)

**104. The Country Newspaper.** Rural journalism and its relation to the community it serves. The country editor and his duties. The style of the country paper. Business management; cost-finding; securing national advertising, developing local advertising. Prerequisites; courses 1 and 2. One unit, first semester. (Bliven.)

**105. The Literary Laws of Editing.** Growth of position of editor; the rise, development, types of periodical literature; editing of a classic; book reviewing. Two units; second semester. (Dixon.)

**106. The Psychology of Advertising.** The fundamental facts and principles of psychology which are related to advertising. Criticism of various methods used to determine these facts, and to apply them to actual advertising problems. Comparison of experimental laboratory results with actual advertising campaigns. One unit; second semester. (Owen.)

**107. History of Journalism.** The earliest types of newspapers. The origin and development of the American press. Personal journalism; Hearst; the newspaper of the future. Prerequisites, courses 1 and 2. One unit; second semester. (Bliven.)

**200. Criticism and Reviewing.** A detailed study of the functions, powers and obligations of the reviewer. Literary, artistic and dramatic criticism. Two units; first semester. (Dixon.)

**Major Work:** Twenty units in Journalism and ten units in English (not including English 1). Of particular value to major students are Journalism 1, 2, 3, 4, 7, 9 and 107; and English 20, 103, 143 and 145.

**Minor Work:** Ten units. Journalism 1, 2, 100 and 102 are suggested.

The attention of Journalism majors is called to the following courses in other departments, which are of particular value to those who intend to take up newspaper work:



English History (History 1); History of the United States (History 13 and 13a); Europe since the Congress of Vienna (History 111); Principles of Economics (Economics 1); Municipal Problems (Economics 101); Labor Problems (Economics 102); Immigration (Sociology 103); Elementary Law (Political Science 2); General Psychology (Philosophy).

## LATIN-AMERICAN DEPARTMENT

K. T. FORRESTER, R. E. SCHULZ, F. J. KLINGBERG,  
R. MALCOLM, Professors  
J. ZIEGNER-URIBURU, Special Lecturer

### LANGUAGE AND LITERATURE

1. **Elementary Spanish.** (See Spanish 1a and 1b.)
2. **Advanced Spanish.** (See Spanish 2 and 3.)
4. **Spanish Conversation.** (See Spanish 4.)
5. **Commercial Spanish.** (See Spanish 5.)
114. **Current Events.** (See Spanish 114.)

For courses in the Literature of Spain, see Spanish 106 to 217.

**106. Latin-American Literature.** A general survey of the Spanish Literature of South and Central America, Mexico and Cuba. I unit; second semester. (Not given in 1916-1917.) (Uriburu.)

**107. Latin-American Poets.** An intensive study of the works of Ruben Dario and other poets of Latin-America. One unit; second semester. (Uriburu.)

### HISTORY AND POLITICAL SCIENCE

**109. The History of Spanish Possessions** in South and Central America and Mexico. Given, 1916-1917, in connection with History 117. (Klingberg.)

**110. International Law.** (See Political Science 100). One unit; second semester. (Malcom.)

See also History 130 and 135.

### ECONOMICS AND SOCIOLOGY

**112. The Economic and Commercial Geography of Latin-America.** Intended primarily for those who intend to take up trade relations with, or enter into the professional field of Latin-America. Social conditions will also be considered. One unit; first semester. (Uriburu.)

## MATHEMATICS

PAUL ARNOLD, Professor

HUGH C. WILLETT, Associate Professor

## LOWER DIVISION COURSES

1. **Theory of Algebra.** A lecture and text book course in which emphasis is placed principally upon the theory and the development of algebra. This course includes a review of elementary algebra, special attention being given to proofs of fundamental laws and principles. Three units; both semesters. (Arnold.)

2. **Solid and Spherical Geometry.** The fundamental propositions of the Euclidean geometry of space. Three units; first semester. (Willett.)

3. **Trigonometry.** Plane trigonometry and its applications, and logarithms. Three units; second semester. (Willett.)

4. **Algebra.** Mathematical induction, equivalent equations, surds and complex numbers, theory of quadratic equations, simultaneous quadratic and higher equations, ratio, proportion, variation, the progressions and other simple series, inequalities, permutations and combinations, the binomial theorem for any exponent, limits and infinite series, determinants, the theory of equations. Two units; both semesters. (Willett.)

5. **Advanced Trigonometry.** This course is planned particularly for engineering students, and includes a review of plane trigonometry, as well as a thorough study of the fundamental principles of spherical trigonometry and the application of its formulas to the solution of spherical figures. Prerequisite, course 3 or entrance trigonometry. Two units; first semester. (Arnold.)

6. **Plane Analytic Geometry.** The analytic geometry of the straight line, the circle, and the conic sections, including a discussion of the general equation of the second degree and some special examples in higher loci. Five units; second semester. (Arnold, Willett.)

7. **Differential Calculus.** Development of the fundamental principles and formulas, and applications to various problems in geometry and analysis. Three units; first semester. (Arnold.)

## UPPER DIVISION AND GRADUATE COURSES

**108. Integral Calculus.** The general principles of the integral calculus are developed, and the usual applications made to centers of gravity, to moments of inertia, and especially to geometry. Three units; second semester. (Arnold.)

**111. Analytical Mechanics.** The mathematical treatment of statics, kinematics, and dynamics. Prerequisite, courses 7 and 108. Three units, first semester; two units, second semester. (Lawrence.)

**112. Descriptive Astronomy.** A general course, requiring only the mathematics of courses 1-3. Open to students in the last two years of college course. Two units; first semester. (Lawrence.)

**209. Advanced Analytic Geometry and Differential Equations.** The analytic geometry is a continuation of course 6, and includes a brief course in analytic geometry of three dimensions. The course in differential equations is elementary and open to students who have taken course 108. Two units; both semesters. (Arnold.)

**210. Teachers' Course.** Lectures on teaching mathematics, and lectures giving a review of elementary mathematics from the standpoint of preparing teachers for secondary schools. The history of mathematics is also studied. Two units; both semesters. (Arnold.)

**Major Work.** Thirty semester units.

**Minor Work.** Ten units, including 7 and 108.

**High School Teachers' Recommendation.** Courses 1-7, 108, 112, 209, 210.

## MUSIC

Students who take harmony and theory or advanced instrumental or vocal work in the College of Music may be allowed College credit for the same, but the credit shall in no case exceed fifteen semester units, and will be given only upon the recommendation of the Dean of the College of Music.

## ORATORY

BEULAH WRIGHT, Professor

GERTRUDE COMSTOCK, ELIZABETH YODER, EVA M. SMITH,  
Associate Professors

**1. Fundamentals of Common Reading.** The principles of expression, voice building, and tone placing. Interpretation of literature. Two units, either semester. (Open to freshmen only.)

**2. Modern Poets and Prose Writers.** A general study of the life and writings of the modern poets and prose writers. Two units, both semesters. (Open to freshmen and above.)

**3. Shakespeare.** Plays are considered with reference to the vocal interpretation. Two units, throughout the year. Prerequisite, course 1. (Open to sophomores and above.)

**4. Art of Interpretation.** A study of the art principle involved in the public interpretations of literature. Two units, both semesters. (Open to sophomores and above.)

**100. Public Speaking.** The consideration and delivery of the various forms of public address, with platform exercises throughout the course. Rapid formulation of thought and its effective presentation is acquired. Two units, second semester. Prerequisite, course 1.

**101. Argumentation and Debate.** A practical and theoretical training in the method of arguments; brief drawing; practice debate. Two units, both semesters. (Open to sophomores and above.)

**200. Interpretation and Expression.** Lectures on voice technique and interpretation of literature, oral practice of selections from masterpieces. Two units, first semester. (Open only to graduates who are candidates for the teacher's certificate.)

Not to exceed fifteen units from the above courses may be counted toward the A.B. degree.

## ORIENTAL STUDIES AND COMPARATIVE LITERATURE

JAMES MAIN DIXON, JOHN HEDLEY, J. G. HILL, ROY MALCOLM, Professors

K. J. INUI, Lecturer in Japanese Sociology

IOHANE F. SAKAIZAWA, Instructor in the Japanese Language

EARL A. HAYDOCK, Instructor in Rhetoric

**1. Japanese History and Civilization.** Early Japan. Japan as the pupil of Korea and China. Influence of Buddhism. The rise of feudalism and of the Shogunate. The century of



foreign intercourse. The later centuries of Tokugawa isolation and centralization. The Meiji era. Problems of today. Two units; first semester. (Dixon.)

**2. Chinese History and Civilization.** The successive dynasties of the great empire. Foreign relations during the last few centuries. Founding of the republic. Problems of today. Two units; first semester. (Hedley.)

**3. Philippine History and Civilization.** The conquest of the islands in the sixteenth century; intercourse with China and Japan in early times; the Spanish occupation; the American teacher at work; the industrial future of the islands. Two units; second semester. (Dixon.)

**5. English Rhetoric and debating for Oriental Students.** A class intended to give Japanese and other Oriental students more readiness in the use of English. Two units; throughout the year. (Torrance.)

**6. The Japanese Colloquial.** Chinese ideographs and Japanese syllabaries. Romaji transliteration. Grammar of the spoken language, with exercises. Two units; second semester. Sakaizawa.)

**7. The Chinese Mandarin Language.** One unit, first semester. (Hedley.)

#### UPPER DIVISION COURSES

**100. Oriental Philosophies and Religions.** (Philosophy and Psychology 146.) Two units; throughout the year. (Dixon.)

During the first semester the philosophical systems, particularly of Hindustan, will be studied. In the second semester attention will be devoted to the religions of Asia and the intellectual problems that confront the Christian missionary and educator.

**101. Japanese Literature and Bibliography in English.** A discussion of authors who have written upon Japan, from Kaempfer to Aston. The Japanese miniature poem (uta) in the original and in translations. Two units. (Dixon.)

**102. Japanese Immigration.** A study of the problems resulting from the meeting of two civilizations on the Pacific Coast. Two units; summer session, 1917. (Inui.)



**103. The Industrial Development of Japan.** History of the cotton, silk and other industries. Development of the northern island under American instruction. Osaka as a trade center. Banking methods. Problems in the newly acquired possessions. One unit; second semester. (Dixon.)

**104. The Political Development of Japan.** Mediaeval feudalism; Tokugawa bureaucratic methods; modern Imperialism. Extra-territoriality until 1898. Two units. (Dixon.)

**105. The Political Institutions of China.** Two units; second semester. (Hedley.)

**106. International Law.** (Political Science 100.) Two units; throughout the year. (Malcom.)

**107. The Wisdom Literature and Poetry of Israel.** (Religious Education 100.) Two units; first semester. (Hill.)

**108. The Ruling Ideas of the Bible.** Religious Education, 12.) Two units; throughout the year. (Hill.)

**109. The Messianic Hope.** Its appearance in Mithraism and other Oriental religions; its development and fulfilment. (Religious Education 112.) Two units; second semester. (Hill.)

**110. Persian Literature and Persian Themes in English Literature.** The "Rubaiyat" of Omar Khayyam; Firdausi's "Shah-Nameh"; Arnold's "Sohrab and Rustum." Two units; first semester. (Dixon.)

**111. Sixteenth Century India.** Arrival of the Portuguese in Southern India. Calicut and Goa. Careers of Vasco da Gama and Albuquerque. Camoëns' great epic, *The Lusiads*. The Muhammadan empire of Babar and his successors. Character and ideals of Akbar. Tennyson's *Akbar's Dream*. Two units; summer session, 1917. (Dixon.)

**112. The Founding of British Rule in India.** Careers and policies of Lord Clive, Warren Hastings, Wellesley, Bentinck and Dalhousie. Two units; second semester. (Dixon.)

**113. Kipling's India.** Bombay, Simla, Peshawar, Lahore, Calcutta and other localities, with their literary traditions. Two units; Summer session. (Dixon.)

**114. Problems of American Government in the Philippines.** Education; finance; agriculture; commerce. Development of representative institutions. 2 units; summer session, 1917. (Dixon.)

**115. Celtic Civilization and Literature.** The bards of Ireland, Scotland and Wales. Traditions of the Isle of Man, Cornwall, Brittany and Walloon Belgium. Origin and growth of the Arthurian romance. Two units; second semester. (Dixon.)

**116. Racial Psychology and Ethnology.** See Religious Education 144. Two units; throughout the year. (Hill.)

**Major Work.** Thirty semester units, to be accompanied or preceded by the following courses: Religious Education 1, 2 and 21. History 117, and Sociology 103.

**Minor Work.** Ten semester units.

## PHARMACY

The following courses in the College of Pharmacy may be offered as lower division electives toward the degree of Bachelor of Arts, up to a maximum of fifteen units.

Junior Pharmacy.....	8 units
Senior Pharmacy.....	6 units
Materia Medica.....	2 units
Pharmacognacy .....	2 units

In addition to the above fifteen units, the work in Chemistry and Biology may be credited, unit for unit.

## PHILOSOPHY

RALPH TYLER FLEWELLING, JOHN G. HILL, FESTUS E. OWEN, JAMES M. DIXON, Professors

**100. History of Ancient and Mediaeval Philosophy.** The leading systems of thought from the time of the early Greeks until the renaissance. The aim of the course is to acquaint the student with the leading problems of philosophy through a study of the origins of the different systems. Three units; first semester. (Hill.)

**101. History of Modern Philosophy.** The leading systems of philosophy from the renaissance to the present. Continuation of course 100. Three units; second semester. (Hill.)

**102. Modern Philosophical Tendencies.** A study of Kant and Spencer, as representing contrasting schools, with their development to the present. Three units; first semester. (Flewelling.)

**103. Modern Philosophical Tendencies.** The philosophy of change, pragmatism, neo-realism, and modern idealism as represented by Eucken, Royce, Ward, and Bosanquet. Continues course 100. Three units; second semester. (Flewelling.)

**104. Philosophical Movements in Literature.** An untechnical study of the popular tendencies of philosophic thought as given in the literature of different periods. Reading from the Greek dramatists, Plato, and Aristotle. Two units; first semester. (Flewelling.)

**105. Philosophical Movements in Literature.** An untechnical study of tendencies of religious and philosophic thought as illustrated in modern literature. Lectures and readings. Two units; second semester. (Flewelling.)

**106. The Philosophy of Henri Bergson.** The text used is "Creative Evolution." This course seeks to understand the new philosophy of life—"vital impetus." Offered alternate years with course 42. Two units; first semester. Not offered, 1917-1918.

**107. Oriental Philosophers and Religions.** Early Babylonian and Persian philosophical thought, Hindu speculation, the Forest philosophers of India, Buddhist philosophers, Mahomedan philosophers. The Ethics and intellectual activities of China, Shintoism and Bushido, Zen and other sects. Two units; throughout the year. (Dixon.)

**108. Philosophy of Education.** (See Education 110-11.)

**109. Aesthetics.** (See Education 107.) (Stowell.)

**120. Personalism.** A study of personality, not only as the foundation of perception and thought, but also as the ground of being, with special reference to the system of Borden Parker Bowne. Two units; first semester. (Flewelling.)

**121. Personalism and the Problems of Philosophy.** The relation of personalism to other philosophies, ancient and modern. Presupposes course 131. Two units; second semester. (Flewelling.)

**122. Ethics.** This course is based upon the text of Dewey and Tufts' "Ethics," with collateral study of Mill's "Utilitarianism," Kant's "Metaphysics of Ethics," and Spencer's "Data of Ethics." The general nature of moral conduct is studied, the evolution of the moral problem from primitive life to the present is traced, a comparative study of current ethical theories is attempted, and some application of the results of these studies is made to present problems of individual and social life. Two units; first semester. (Owen.)

**123. Theism and the Philosophy of Religion.** A careful examination of the leading theories offered in explanation of the ultimate nature of reality. A clear philosophy of religion is sought by a sympathetic study of the light which recent science sheds upon the problems of nature, man, and mind. The texts used are Iverach and Bowne. Prerequisites, Philosophy 1. Two units; second semester.

**124. Philosophy of the Christian Religion.** An attempt to understand the genius of Christianity by a searching study of the teaching of Jesus as found in the original sources. See Religious Education 110. Two units; first semester. (Hill.)

**130. Elementary Logic.** A study of the inductive and deductive aspects of reasoning, with application to practical problems. It is the aim of this course to stress the vital connection between logic and the practical problems of everyday life; to train the student in critical habits of thought, and to give him a good basis for further philosophical study. While Psychology 1 is recommended as a preliminary, it is not required. Three units; first semester. (Owen.)

**131. Theory of Thought and Knowledge.** A consideration of the nature, origin and validity of knowledge, critical and constructive. Three units; first semester. (Flewelling.)

**132. Metaphysics.** Treats of the main problems of philosophy, the theory of being, reality, self, the world, God, and the problem of evil. Three units; second semester. (Flewelling.)

**Major Work.** Thirty semester units.

**Minor Work.** Ten semester units.



**PHYSICAL EDUCATION**

WM. RALPH LA PORTE, Professor of Physical Education

DEAN CROMWELL, Director of Competitive Athletics

EDNA A. COCKS, Associate Professor of Physical Education (Women)

CHESTER H. BOWERS, M.D., Medical Examiner of Men

ELSA H. HORSTMANN, M.D., Medical Examiner and Lecturer in  
Hygiene to Women

LYDIA MYRICK, Instructor in Swimming (Women)

BERNHARD OERTLEY, CLEMENT STOREY, JESSIE GRIEVE ,

GRACE WITHERELL, RUTH WININGER,

Gymnasium Assistants

The aims of the department are: 1) to develop organic power, physical judgment, presence of mind, self-reliance, courage, and strength of will; (2) to secure harmonious muscular development and a reasonable degree of bodily skill and grace; (3) to conserve the social and moral values of sports and games, and give to all students an equal opportunity to take part in college athletics; (4) to develop the "habit of exercise" as a balance to the sedentary demands of University life; (5) to train physical educators and instructors, play leaders and recreation directors, for service in educational institutions, clubs, playgrounds, Young Men's and Young Women's Christian Associations, etc.

For description of the department equipment see Index under "Physical Education."

**Physical Requirement:** A minimum of four units physical credit is required of every student for admission to Junior standing. One unit credit represents the successful completion of a two-hour course lasting through one semester. All Freshmen are required to take at least one two-hour course throughout the year, in Gymnasium (see Physical Education 1). If the physical condition warrants, they will be permitted to elect the other two units requirement in outdoor athletics, either in the Freshman year or later. See Physical Education 4.) Physical Education 10 (Hygiene) is also required of Freshman women.

Women will consult the women's director before securing their gymnasium suits. Men's suits consist of white running pants, sleeveless shirt, supporter, and tennis shoes.

**Physical Examinations:** Every student upon entering the department is given a thorough physical and medical examination. Where defects exist, special exercises are prescribed and advice given as to care of the body, etc. The heart, lungs,



sight, and hearing are carefully tested, various strength tests applied, and measurements taken.

The physical examination must be taken before entering any class work, and each student should make it a point to register early for gymnasium and get the examination out of the way before the last registration day.

#### LOWER DIVISION COURSES

**\*1. General Gymnastics.** A course combining recreation with developmental and corrective work, in the effort to develop organic power, motor efficiency, co-ordination, and a fair amount of muscular strength. Required of all Freshmen. Two hours per week, one unit; throughout the year.

(a) **Men.** Free and light gymnastics, elementary heavy gymnastics, including all the more common pieces of apparatus, and recreative games and races.

(b) **Women.** Systematic class work in gymnastics, including work with dumbbells, Indian clubs, and wands; also rhythmical exercises for grace and harmony of movements. Proper carriage of body is taught by the use of fundamental Swedish and German gymnastics.

**2. Advanced Gymnastics.** A continuation of course 1 on a much more advanced scale. Open only to students who have satisfactorily completed course 1. The work is systematically progressive, and advances as fast as the ability of students permits. Two hours per week, one unit; both semesters.

(a) **Men.** Advanced apparatus will receive much attention, and opportunity will be given for specialization in various activities. Gymnastic dancing.

(b) **Women.** Advanced apparatus work, Swedish, German and aesthetic gymnastics.

**3. Corrective Gymnastics.** Designed to give personal instruction and training to students whose condition prevents their participation in the regular course. Required of all Freshmen unfitted to take course 1. Two hours per week, one unit; throughout the year.

(a) **Men.**

(b) **Women.**

---

\*Note—Courses 1 to 9, inclusive, apply only on the four required physical credits. Courses 10 and following do not apply on required gym., but credit is regularly given for them on the one hundred and twenty units required for graduation.

**4. Out-door Sports.** A supplement to course 1. Students may elect only two of the four required physical credits in this course.

(a) **Men.** Football, track, basketball, baseball.

(b) **Women.** Tennis, basketball, volleyball, indoor baseball, handball, hockey, and swimming.

**10. Hygiene and Sanitation.**

(a) **Men.** (See Department of Biology, General Biology 1 and 2.) Two units; throughout the year. (Ulrey.)

(b) **Women.** Lectures and readings covering the following topics; Food and clothing; bathing; respiration and circulation; general care of the body, with special attention to the eye, ear, nose, and throat; rest and recreation; diseases; sanitation. Two units; throughout the year. (Horstman.)

**15. Principles of Physical Education.** A study of the underlying principles of Physical Education with application to present day needs.. Special attention is given to the general health problem, the need of reforms in Physical Education, history of the movement, etc. The course is intended to serve as an introduction to other courses in Physical Education. Two units; first semester. (LaPorte.)

**16. First Aid to the Injured.** The course covers emergency treatment of fainting, shock, unconsciousness, wounds, hemorrhage, sunstroke, freezing, electric shock, fits, sprains, dislocations, fractures, poisons; the use of bandages, methods of carrying the wounded, recovery of drowning persons. Two units; second semester. (La Porte.)

**20. Playground and Gymnastic Games.** Intended to provide a working knowledge of games and folk dances, for use on the playground and in the gymnasium. The work consists of lectures on theory of play, theory of games, readings, reports, and papers, together with practical application of the theory in the gymnasium. Two units; second semester. (Cocks.)

**22. Aesthetic Technique and Folk Dancing.** A study of the fundamentals of aesthetic movements, for the purpose of developing greater muscular co-ordination, poise, and control. The native folk dances of various countries are studied, including Sweden, Russia, Holland, Germany, France, and England. This gives the student a better understanding of the life and customs of these people. Two units; throughout the year. (Cocks.)

**25. Playground Activities.** Students desiring the playground certificate will be required to spend at least two afternoons per week on the city playgrounds in cadet work. This will be done in connection with course 110, without extra credit. Special arrangements will be made for all students desiring it.

**26a. Boy Scout Activities.** History of the movement; theory of scouting; form and content of the scout program; methods of organizing and conducting troops; requirements, including knot-tying, signaling, fire-building, cooking, first aid, life-saving, nature study, etc. One unit; first semester. (LaPorte.)

**26b. Campfire Girls Activities.** A study of the campfire movement, its origin, purpose, methods, and activities. Given in connection with course 20. (No separate credit.)

#### UPPER DIVISION COURSES

**106. Physical Education Methods.** A course of practical training in methods of handling squads and classes on the gymnasium floor, with a careful study and application of the nomenclature for calisthenics, apparatus, and gymnastic dancing. Sample lessons in German and Swedish gymnastics will be prepared and taught, subject to the open criticism of the class and instructor. Two hours lecture and practice, and two hours experience per week. Two units; first semester.

(a) **Men.** (LaPorte.)

(2) **Women.** (Cocks.)

**107. Physical Education Administration.** A continuation of course 106, with a more advanced study of general methods of organizing and administering a Physical Department. Methods of conducting meets, tournaments, and contests will be studied. Practice work will be given in conducting classes under supervision. Two hours lecture and practice, and two hours experience per week. Two units; second semester.

(a) **Men.** (LaPorte.)

(b) **Women.** (Cocks.)

**109. Theory of Play.** A study of the nature, function, and need of play; theories of play; pleasurable elements in games; criteria of the value of play; place of play in life and education; aims and spirit in the conduct of play; age and

sex differences; need for play spaces and organized play in school, city, and country; significance of the playground as related to social conditions of the neighborhood. Three units; first semester. (LaPorte.)

**110. Playground Administration.** History of Playgrounds; construction and equipment; maintenance and supplies; organization and management of activities; athletics, games, gymnastics, contests, tournaments, care and use of apparatus, story-telling, etc.; government and discipline; hygiene of the playground. Prerequisite, course 109. Arrangements have been made by which practice work can be secured on the municipal playgrounds. Two units; second semester. (LaPorte.)

**111. Physiology of Exercise.** A study of the effects of exercise on health, with consideration given to movements, heat, combustion, fatigue, breathlessness, sickness, exhaustion, training, overwork, exercises of speed, strength, endurance. Two units; first semester. (LaPorte.)

**112. Kinesiology.** A brief study of the motor organs with reference to joint and muscular mechanism. The relation of various sets of movements to muscular development. Definitions, grouping, and arrangement of gymnastic movements. Two units; first semester. (Cocks.)

**115. Anthropometry and Physical Examinations.** A study of physical characteristics and their influence on the individual; physical defects; simple tests for abnormalities; methods of taking physical measurements, and testing heart, lungs, eyes, ears, etc. Prescription of exercise. Two units; second semester. (LaPorte.)

**120. Massage and Orthopedic Gymnastics.** A study of the physiologic and therapeutic effects of massage; its application to various diseases of the muscles, tendons, and joints. Methods of correcting improper posture, uneven and rounded shoulders, curvature of the spine. Two units; second semester. (Cocks.)

**Special Playground Certificate.** A certificate of proficiency in playground work will be given to those completing satisfactorily the following courses: 1, 4, 10, 16, 25, 26, 106, 107, 109, 110. Candidates will be required to give evidence of proficiency in teaching, gymnastic and athletic ability.



**PHYSICS**

ARTHUR W. NYE, J. H. MONTGOMERY, Professors

AUGUST HUND, Assistant Professor

LOREN T. CLARK, RALPH T. JAYNE, CLARE GARD,

EARL T. BROWN, Laboratory Assistants

**LOWER DIVISION COURSES**

1. **General Elementary Physics.** A course intended for those who have not studied high school physics. Lectures, recitations, demonstrations and laboratory exercises dealing with the principles and applications of physics. Recommended for non-technical students and those preparing for the study of medicine. Class work four hours per week, laboratory work three hours per week. Five units; throughout the year. (Nye and assistants.)

2. **Mechanics.** Lectures and recitations. Three units; first semester. (Hund.)

3. **Mechanics.** Laboratory course. Three hours during one afternoon of each week. One unit, first semester. (Nye.)

4. **Heat.** Lectures and recitations. Two units; first semester. (Nye.)

5. **Heat.** Laboratory course. Three hours during one afternoon of each week. One unit; first semester. (Nye.)

6. **Electricity.** Lectures and recitations. Three units; second semester. (Hund.)

7. **Electricity.** Laboratory course. Three hours during one afternoon of each week. One unit; second semester. (Nye.)

8. **Light.** Lectures and recitations. Two units; second semester. (Nye.)

9. **Light.** Laboratory course. Three hours during one afternoon of each week. One unit; second semester. (Nye.)

**Note**—Courses 2 to 9, inclusive, require a knowledge of high school physics and trigonometry. They are recommended for students pursuing scientific or technical studies. In the laboratory courses, instruction sheets prepared by the department are the basis for the work. The experimental work performed by the students is similar to that described in Millikan's "Mechanics, Molecular Physics and Heat" and Miller's "Laboratory Physics." Courses 3 and 5 may be taken coincidentally, half of the time being spent on each, and half credit received. The same is true of Courses 7 and 9.



**16. Applied Electricity.** A course in the principles and applications of electricity. Prerequisites, Physics 6. Two units; second semester. (Hund.)

**17. Physical Measurements.** Laboratory course to accompany 16. One unit; second semester. (Hund.)

**21. Shop Work.** Instruction in the use of wood and metal working tools and machinery, including cutting, filing, drilling, tapping, polishing, screw-cutting and elementary lathe work. Three or six periods in laboratory, one or two units; either semester. (Brown.)

LOWER DIVISION COURSES

**105. Electrical Measurements.** A laboratory course in which the theory and methods of exact electrical determination are taken up, including the determination of resistance by various methods, galvanometer constants, the measurement of current and electromotive force, insulation tests, hysteresis and permeability tests, the calibration of instruments, the use of condensers, the measurement of induction, etc. Six periods per week. Two units; either semester. (Hund.)

**106. Heat.** Study of state changes, kinetic theory, radiation, and exact methods of experimental work. Two units; first semester. (Nye.)

**107. Physical Measurements.** To accompany course 106. Two units; first semester. (Nye.)

**108. Light.** Study of lens imperfections and methods of correcting; interference, polarization, spectroscopy, etc. Two units; second semester. (Nye.)

**109. Physical Measurements.** To accompany course 108. Two units; second semester. (Nye.)

**110. Sound.** General principles, theory of vowel sounds, construction of musical instruments, architectural acoustics. Two units; first semester. (Nye.)

**111. Physical Measurements.** To accompany Course 110. Two units; first semester. (Nye.)

**112. Photometry and Illumination.** Lectures and recitations. A study is made of the physiological and physical phenomena of artificial illumination, methods of measurement, types of photometers, types of illuminants and their

characteristics, reflectors, and the principles of interior and street illumination. Three units; first semester. (Nye.)

**113. Photometry.** A laboratory course to accompany Physics 112. One or two units; first or second semester. (Nye.)

**114. Thermodynamics.** A study of the laws of gases, heat cycles, temperature-entropy diagrams, pressure-volume diagrams applied to gas, hot air and steam engines and refrigerating machines. One unit; first semester. (Nye.)

**116. Radio-activity and Passage of Electricity Through Gases.** Lectures and recitations. Two units; second semester. (Montgomery.)

**118. Wave Motion.** Lectures. A study of water, sound and ether waves and their phenomena. Two units; first semester. (Hund.)

**120. Wave Motion.** A continuation of course 118 and dealing exclusively with the phenomena of electro-magnetic waves, their production, measurement, use, etc. Two units; second semester. (Hund.)

#### GRADUATE COURSES

**202. High Frequency Measurements.** Lectures. Study of methods of production and measurement of high frequency currents and electro-magnetic waves and their phenomena. Two units; first semester. (Hund.)

**203. High Frequency Measurements.** Laboratory course to accompany course 202. Four hours each Saturday morning. Two units; second semester. (Hund.)

**206. Teacher's Course.** Lectures and discussions of methods of presenting and teaching various parts of Physics and the equipment and management of the laboratory. Two units; second semester. (Nye.)

**Major Work:** Twenty-four hours in Physics and ten hours in Electrical Engineering or Civil Engineering.

**Minor Work:** Twelve units, including course 105.

**High School Teacher's Certificate.** The candidate must complete courses 2 to 9, 21, 105, 114, 116, 202, 206, courses in Mathematics, including the Calculus, elementary and ad-

vanced courses in Chemistry and sufficient other courses in pure and applied Physics to demonstrate his ability to pursue methods of thinking and experimenting, which are in accord with present-day physical scientific investigation.

For additional work in theoretical and applied Physics see courses in Civil and Electrical Engineering.

### **POLITICAL SCIENCE**

ROY MALCOM, FRANK J. KLINGBERG, JAMES MAIN DIXON,  
LESLIE F. GAY, JR., Professors  
JOHN HEDLEY, K. S. INUI, Lecturers  
HARRY J. McCLEAN, Instructor

#### **LOWER DIVISION COURSES**

1. **Introduction to Political Science.** The historic origin of political science; theories of the State; the nature of sovereignty; the structure and province of government. Lectures, readings, reports. Two units; throughout the year. (Malcom.)

2. **Elementary Law.** A study of elementary law, involving the use of a text book, lectures, cases, and special readings. Designed specially for those students who, though not intending to enter the legal profession, desire to have an elementary knowledge of law. Two hours; throughout the year. (McClean.)

3. **Political Conditions in the Philippines.** (Dixon.) See Oriental Studies 3.

#### **UPPER DIVISION AND GRADUATE COURSES**

100. **International Law.** The nature, sources, and principles of International Law; the influence of Christian civilization upon rules. Special attention is given to The Hague Conferences of 1899 and 1907. Lectures, readings, and study of cases. Two units; throughout the year. (Malcom.)

101. **Parties and Governments in Europe.** A series of studies in the field of the comparison of the different methods of government in actual practice in the various states of Europe. Lectures, readings and reports. Two units; throughout year. (Gay.)

102. **Japanese-American Relations.** A study of problems resulting from the meeting of two civilizations on the Pacific Coast. Japanese immigration. Two units; second semester. (Inui.)

**103. The Industrial Development of Japan.** History of the cotton, silk, and other industries. Development of the northern island under American instruction. Osaka as a trade center. Banking methods. Problems in the newly acquired possessions. One unit; second semester. (Dixon.)

**104. European Expansion in Asia** with special reference to French and Dutch methods of Colonization. Two units; throughout the year. (Klingberg.) See History 117.

**105. The Political Institutions of China.** Two units; second semester. (Hedley.)

**106. The Government of England,** Colonial Government, and Self-Government within the British Empire. Two units; throughout the year. (Klingberg.)

**107. Municipal Problems.** Three units; first semester. (Hunt.) See Economics 101.

**108. Political Institutions of the American Colonies.** A study of the political life and institutions of the thirteen American Colonies. Special attention given to the theories and practice of local government. Lectures, readings, reports. Two units; throughout the year. (Malcom.)

**111. Sixteenth Century India.** Arrival of the Portuguese in Southern India. Calicut and Goa. Careers of Vasco de Gama and Albuquerque. Camoens' great epic, *The Lusiads*. The Muhammadan empire of Babar and his successors. Character and political ideals of Akbar. Tennyson's *Akbar's Dream*. Two units; Summer session, 1917. (Dixon.)

**112. The Founding of British Rule in India.** Careers and policies of Clive, Hastings, Wellesley, Dalhousie and Bentinck. Two units; second semester. (Dixon.)

**115. Latin-American Government.** A series of investigations into the workings of State and Municipal government in the leading Latin-American Republics. Lectures, readings, and reports. Two units; throughout the year. (Gay.)

**200. American Government.** A study of municipal, state and national government in actual operation. Special attention given to the practical administration of government. Lectures, reports, and special investigations. Three units; throughout the year. (Malcom.) See also History 216.

**Major Work.** Thirty semester units, one-half of which must be in upper division courses. In meeting the require-



ments for the major, courses may be chosen, with the approval of the department, from other fields, particularly the fields of History and Economics. In addition to the regular lectures and classroom work addresses are given, from time to time, by men and women who are engaged in the actual administration of government.

**Minor Work.** Ten semester units, including at least four in upper division courses.

## PSYCHOLOGY

FESTUS E. OWEN, JOHN G. HILL, Professors

**1. General Psychology.** A textbook on Psychology Lectures and collateral reading on various topics. Classroom demonstrations, with guidance to private observation. Supplementary elementary experimental work from Seashore's "Elementary Experiments in Psychology" and Witmer's "Analytical Psychology." Three units; first semester. (Owen.)

**2. Elementary Experimental Psychology.** Elementary laboratory study of visual, cutaneous, and auditory sensations; space perception. The purpose of the course is to acquaint the student with the methods of experimental study of psychological problems, thus preparing him for advanced experimental work and at the same time giving him a more intimate knowledge of the facts and principles of general psychology. One hour per week will be devoted to lectures and reports, two laboratory periods per week to experimental work. Three units. (Owen.)

### UPPER DIVISION COURSES

**100. The Psychology of Thinking.** A study of the nature and function of thinking. The aim is, through the insight gained into the nature and function of thinking, to develop in the student that habit of thought which is seen to be most fruitful in grappling with the problems that arise in individual experience. The viewpoint is biological. Inquiry is made into the conditions that give rise to problems and reflective processes, and the way in which thinking attacks and solves these problems is exhibited. Applications are made to the problems of education, science, and every-day life. Three units; second semester. (Owen.)



**101. Abnormal Psychology.** A study is made of dreams, hallucinations, hysteria, hypnotism, telepathy, spiritism, multiple personality, mental healing, the subconscious, and kindred topics. The aim is to discover the underlying principles of abnormal mental processes and to correlate them with the normal psychic activities. Two units; first semester. (Owen.)

**102. Social Psychology.** (Sociology 120.) Based on assigned readings in Ross, McDougall, Baldwin, Cooley, and others. The social instincts, the development of the self, the social nature of the self. Imitation, custom imitation, fashion imitation. Suggestibility, the crowd, the mob, formation of permanent groups, group conflicts, group leadership, group consciousness. The formation of public opinion, its fundamental part in maintaining group stability and in securing group advancement. Three units; first semester. (Bogardus.)

**103. The Psychology of Religion.** This course will deal with the normal and abnormal phenomena of religious experience; religion in relation to the subconscious and the conscious; faith cures, conversion, the growing life, inspired genius, non-religious persons, congregational and revival control, etc. Three units; second semester. (Hill.)

**104. Applied Psychology.** An outline study of the applications of psychology to the problems of health, vocational guidance, mental measurement, advertising, and salesmanship. Lectures, readings, reports. Two units; second semester. (Owen.) Not given, 1917-18.

**105. Genetic Psychology.** A study of the genesis and evolution of conscious processes and behavior. Types of animal behavior, racial and individual development. Special attention to the growth and development of the child mind. The course is conducted with reference to the problems of the teacher. Two units; second semester. (Owen.)

**106. Psychology of Advertising.** (Journalism 106.) The fundamental facts and principles of psychology which are related to advertising. Criticism of the various methods used to determine these facts and to apply them to actual advertising problems. Comparison of experimental laboratory results with actual advertising campaigns. One unit; second semester. (Owen.)

**107. Seminar.** One unit; both semesters. (Owen.)

**108. Racial Psychology and Ethnology.** See Religious Education 144. Two units. (Hill.)

**Major.** Thirty units, to include Logic (3 units), and History of Philosophy (6 units.)

**Minor.** Ten units, exclusive of course 1.

## RELIGIOUS EDUCATION

JOHN G. HILL, ROBERT J. TAYLOR, J. H. MONTGOMERY,  
Professors

CARL S. KNOPF, Assistant Professor

### LOWER DIVISION COURSES

**1. The Pentateuch and Ohter Historical Books of the Old Testament.** The origin, histry, tradition, cosmology, morals laws, government, and religious philosophy of the Hebrews from Abraham to Solomon will be considered. The questions of date, authorship, purpose, plan, style of literary composition and ruling ideas of each book will be studied. Two units; first semester. (Knopf.)

**2. The Prophetic and Chronicle Books of the Old Testament.** This course will survey the varied and swiftly changing periods of Hebrew history from the close of the United Kingdom to the end of Old Testament times. The greatest stress will be laid upon the study of the prophets; their unique place and power, their relation to state and Church, their distinctive messages and permanent contribution to the history of religion. Two units; second semester. (Knopf.)

**3. The Bible as Literature.** A survey course covering the entire Biblical field from the literary point of view. The great epics, lyrics, dramas, biographies, essays are studied with a view to exact knowledge and correct interpretation of them. The necessary historical background is included. Two units; first semester. (Knopf.)

**4. Israel's Social Institutions.** The evolution of the Hebrew family, tribe and state, including a study of Semitic origins. The course is designed to give the student knowledge of the customs of the Semitic peoples, in order to understand better the references to them in the Scriptures. Laws of marriage, blood revenge, sacrifice, resident aliens are noted and the social and democratic ideals of the old Testament carefully collated. Two units; second semester. (Knopf.)

**10. The Apostolic Age of the New Testament.** This course is a careful survey of the Apostolic Church of the first century, its origin, its strange success, its baneful conflicts with Judaism, its brutal persecutions by Paganism, and its new life in the dying Empire; also a comparison of the religious ideas of Paul, Peter, James, and John, and of their mode of inspiration. Two units; first semester. (Hill.)

**11. The Gospel History and Literature of the New Testament.** A study of the life, teachings, work, and significance of Jesus Christ as portrayed in the Four Gospels and as seen against the historic background of modern scholarship. Special emphasis is laid upon the living authority of Jesus and the ruling ideas of the Sermon on the Mount in sharp contrast to Jewish and Pagan religious ideas. Two units; second semester. (Hill.)

**12. The Ruling Ideas of the Bible.** A study of the rise, development, history, and permanence of the essential teachings of the Old and New Testament traced in their historical order. Two hours; throughout the year. (Hill.)

**21. The Genesis of Missions.** A study of the nature, universality and purpose of religion, and a comparison of Christianity with the non-Christian religions. The spread of Christianity throughout the Graeco-Roman world, with special attention given to the difficulties which confronted the early church; followed by a survey of the missionary movements which resulted in the winning of Northern Europe. Lectures, reports, and readings. Two units; first semester. (Taylor.)

**22. The Modern Progress of Christianity.** A study of Christianity since the Reformation. The development of the missionary movements of Protestantism from the time of the Pietists and Moravians to present-day missionary organizations, followed by a study of Christianity in its world-wide reach. Lectures, assignments and paper. Two units; second semester. (Taylor.)

**23. Missions in the Far East and the Pacific Islands.** (a) The Evolution of China. A study of the physical, historical, social and religious view-points, and of the missionary problems, methods and results. (b) The New Japan. A study of the rapid rise of Japan out of the feudal conditions, and a survey of the history and present problems of Christian missions. (c) The Pacific Islands. A study of the Christian

forces in the Philippines and the Pacific Island groups. Two units; first semester. (Taylor.)

**24. Missions in India, Moslem Lands, Africa and Spanish-America.** (a) The Awakening of India. A study of the history of the Indian peoples, followed by a survey of Christian missions, their problems and work. (b) The Mohammedan World. A study of Mohammedanism as a force in the world today. Special use is made of the Koran. (c) The Redemption of Africa. A study of the physical and racial problems and of the pagan peoples. (d) The Rise of Spanish-America. A study of the aboriginal races of the Americas, the Spanish conquest, the colonial and war periods, and present-day struggles in South America and Mexico. This course is concluded by a study of the history and problems of Protestant missions. Two units; second semester. (Taylor.)

**30. Church History.** Given in Maclay College of Theology. Two units. (Knoles.)

#### UPPER DIVISION COURSES

**100. Israel's Wisdom Literature.** An advanced course in the wisdom literature of the Testaments, together with the study of fragments from the Apocrypha. Comparison is made with Egyptian, Babylonian and Greek literature. Two units; first semester. (Knopf.)

**110. The Teachings of Jesus in the Gospels.** A critical study of Jesus' utterances as to his authority, ruling ideas, ethical claims, social program, growing self-consciousness, and views on sin, salvation, death, the future, etc. Three units; first semester. (Hill.)

**101. Israel's Poetic Literature.** A study of the structure and interpretation of the poetic writings of the Semitic peoples with chief emphasis upon the Old Testament. Two units; second semester. (Knopf.)

**111. New Testament Doctrines and Institutions.** A series of inductive studies in the New Testament records (Gospels and Epistles) to determine the meaning and content of doctrines, institutions, and types found therein. Not given in 1917-18. Two units; second semester. (Hill.)

**112. Messianism.** A study of the appearance and development of the Messianic Hope in the ancient world. Egyptian, Babylonian, Persian, Hebrew and other Oriental reli-



gions are considered. A critical appreciation of Christianity as the final expression and fulfillment of this hope is included. Two units; throughout the year. (Knopf.)

**113. New Testament Exegesis.** Given in Maclay College of Theology. Two hours; throughout the year. (Healy.)

**114. Social and Ethical Teachings of the Prophets and of Jesus.** First semester; a study of the prophetic writers with reference to their social and ethical ideals, special problems, changing creeds, opposing parties and varied institutions. Second semester; a comparative study of the social and ethical ideals of Jesus, Paul and John, and their bearing upon modern social movements. Not given 1917-18. Two hours; throughout the year. (Hill.)

**115. The Book of Revelation and Other Apocalyptic Literature.** A study of the origin, purpose, nature and content of Apocalyptic writings found in Daniel, Ezekiel and other Old Testament prophetic books, with special emphasis laid on John's Revelation in the New Testament. Two hours; first semester. Not given, 1917-18. (Hill.)

**116. The Epistle to the Hebrews and the Catholic Epistles.** A study of this group of New Testament books, as regards their origin, purpose, contents, teachings, and general relation to other N. T. writings. Two hours; second semester. Not given, 1917-18. (Hill.)

**120. Religious Pedagogy.** A course designed to fit the student for teaching Bible classes in Sunday Schools, teacher-training courses, etc. The teacher, his work, qualifications and preparation; the student, his physical, mental, and moral nature; the lesson; the teacher's approach to the student; etc. Two units first semester. (Montgomery.)

**121. The Modern Organization of the Church.** The Sunday School, Young People's Societies, various types of church organization; duties of various officers, committees, etc. A course designed to fit for more efficient lay service in the church. Not given, 1916-17. Two units; second semester. (Montgomery.)

**130. The Early English Bible.** The Gospels and Psalms in West Saxon. For description see announcement of the College of Theology. Two units; throughout the year. (Dixon.)

**140. Charities.** See Sociology. Two units; second semester. (Kenngott.)



**141. Social Ethics.** See Sociology. Two units; throughout the year. (Kenngott.)

**142. The Social Message of the Gospel.** The moral basis of the social question; Christ's estimate of life; the social ideals of the Kingdom. Various social institutions are examined to see if they conform to the Kingdom ideals. The lines of co-operation and leadership of the church are indicated. Two units; second semester. (Montgomery.)

**144. Racial Psychology and Ethnology.** A study of Races; their antiquity, distribution, classification, relative levels, mental traits, divergent development, as seen in their ethnic customs, comparative religions, ethics, arts, folk-lore, literatures, and philosophies. Invaluable to those intending to do home or foreign missionary work, social settlement work, and educational work in the United States. Two hours; throughout the year. (Hill.)

**145. Psychology of Religion,** see Psychology 103.

#### GRADUATE COURSES

**200. The Religious Education Seminar.** Discussion of important topics, book reviews, investigation of various problems. One unit; throughout the year.

**201. Seminar in the Relation of Religion to Social Questions.** See Sociology 201. Two units; throughout the year. (Kenngott.)

**Secretarial Course.** Designed to fit for secretarial work in Young Men's and Young Women's Christian Associations and similar organizations. This is a three-year course leading to a certificate, by taking a fourth year and satisfying the complete major requirements the degree of Bachelor of Arts may be secured. The following courses are required:

	Units
Religious Education, 1, 2, 10, 11, 21, 30, 110, 120, 121, 140, 141.....	22
General College Requirements, including Economics .....	32 to 42
Sociology, 100, 101, 103, 106, 118.....	15
Philosophy, 103, 121.....	4
General Biology, 1, 2.....	4
Electives .....	15 or 5
Total .....	92

**Major Work.** For Bachelor degree, 30 units, at least half of which must be in upper division work.

**Minor Work.** Ten units, at least four of which must be upper division work.

## SOCIOLOGY

EMORY S. BOGARDUS, ROCKWELL D. HUNT, Professors

GEORGE F. KENNGOTT, Associate Professor

HARRY J. McCLEAN, Lecturer

JOHN E. KIENLE, Lecturer

ROSCOE L. FRASHER, Assistant

### LOWER DIVISION COURSES

1. **Introduction to Sociology.** A comprehensive study of social progress, with frequent application to concrete conditions. The year's work closes with a summary of social progress. The course is intended to serve as an introduction not only to other courses in Sociology but also to the other social sciences. Open primarily to sophomores; freshmen and juniors admitted. Two units; throughout the year. (Bogardus.)

### UPPER DIVISION COURSES

Arrangements may be made whereby several of these courses may be taken for graduate credit.

100. **Principles of Sociology.** An introductory course for upper division and graduate students. A fundamental course presenting an analytical study of social life and the forces of its orderly development, intended to lay substantial foundation for more advanced work. Not given in 1916-17. Two units; first semester. (Bogardus.)

101. **Municipal Problems.** A study of the main problems affecting urban life. Includes special lectures by leading practical experts. (Same as Economics 101). Three units; first semester. (Hunt.)

102. **Labor Problems.** A discussion of the leading problems confronting men and women engaged in industry. (Same as Economics 102). Three units; second semester. (Hunt.)

103. **Immigration.** The course begins with a study of the general causes of migration in the world's history. It con-

siders the European backgrounds of immigration to the United States, and the problems which the immigrant faces when he attempts to adjust himself to a new and strange environment. Attention is given to the history of immigration to the United States, with special emphasis on present-day immigration problems. The course closes with a study of the foreign races in Southern California, and of the problems likely to arise. Three units; second semester. (Bogardus.)

**104. Charities.** Begins with studies in the nature, extent, and causes of poverty. Examines the organization of charity and the supervision of public and private agencies. The various socially defeated classes are considered. Emphasis is placed upon methods of prevention. The class visits charitable institutions in Los Angeles and the vicinity. Two units; first semester. (Kenngott.)

**106. Social Insurance.** A survey of contemporary social problems with special reference to the principles and methods of social amelioration, followed by a comparative study of certain preventive and constructive measures of leading countries. An examination of both the theory and experience in provision for accident, invalidity, old age and other forms of social insurance. Two units; second semester. (Kenngott.)

**107. The Liquor Problem.** A discussion of the economic and social phases of the liquor problem. (Same as Economics 109). One unit; throughout the year. (Hunt.)

**108. Socialism.** Examines the underlying causes of the modern socialistic movement, studies the various schools of socialistic thought, and presents a critical estimate of socialism as a philosophy of economic evolution and a program of social reform. (See Economics 108.) Two units; second semester. (Hunt.)

**109. The Theory of Play.** A study of the nature, function, and need of play from psychological and sociological standpoints. (Same as Physical Education 109). Two units; first semester. (LaPorte.)

**110. Social Ethics 1 and 2.** During the first semester ethical theories are examined in relation to the social questions and foundations are laid for intensive study of American social conditions. The second semester's work has more particular reference to practical applications. Social and industrial life is subject to the criteria set by a societal point of view. Two units; throughout the year. (Kenngott.)

**111. Playground Administration.** History of the Playground movement. Organization and management of play activities. Practice work given on the Los Angeles municipal playgrounds. (See Physical Education 110). Two units; second semester. (LaPorte.)

**112. Social Legislation.** The basic theory of social legislation. The technique for securing social legislation. A consideration of social legislation now operative with special attention to needed measures. Two units; second semester. (McClean.)

**114. Criminology.** A study of crime from sociological and psychological points of view. Special attention is given to methods for the prevention of crime. Some of the topics considered are: History of methods of punishment, prison systems, prison reform, probation, juvenile court, the George Junior Republic idea, juvenile self-government. Two units; first semester. (McClean.)

**115. Social Surveys.** Social surveys of leading field problems are undertaken. Training in methods is given. Literature on subject is considered. The work may serve to open the way to permanent positions in social service work. Two units; first semester. (McClean.)

**118. Rural Sociology.** The course takes up the Country Life movement. It treats of leading rural problems, such as the rural church, the rural school, rural social organizations. Two units; second semester. (McClean.)

**120. Social Psychology.** Based on assigned readings in Ross, McDougall, Baldwin, Cooley, and others. The social instincts, the social nature of the self. Imitation, custom imitation, fashion imitation. Suggestibility, the crowd, the mob, formation of permanent groups, group conflicts, group leadership, public opinion, social control. Prerequisite: Sixty hours college credit, including a course in the principles of psychology. Three units; first semester. (Bogardus.)

**122. Japanese Immigration.** A study of the conflict of two civilizations, particularly in California, and of the problems arising therefrom. (See Oriental Studies 102). Two units; first semester. (Inui.)

**125. Housing Problems.** Analysis is made of the different types of housing. Causes of housing evils are studied.



Different methods of improving housing conditions are considered and housing inspections in Los Angeles are made. Two units; first semester. (Kienle.)

**127. Social Problems in Relation to Social Service.** A consideration of the social problems which face the social service worker. In 1916-17 the course considered social problems with special reference to public health work. Two units; throughout the year. (Kenngott.)

**132. Elementary Law for Social Workers.** A study of elementary law, designed especially for those students who expect to enter the field of social service, and who desire to have some knowledge of the law applicable to their work. A text book is used, supplemented by lectures and assigned readings. (See Political Science 2.) Two units; throughout the year. (McClean.)

**134. Educational Sociology.** An interpretation of the development of our educational system in relation to the social forces which have produced it. An analysis of certain current problems in education from the sociological viewpoint. Given in summer session, 1917. Two units. (Marvin.)

**136. Social Teachings of the Prophets and of Jesus.** First semester: A study of the prophetic writers with reference to their social ideals. Second semester: A comparative study of the social ideals of Jesus, Paul and John. See Religious Education 114. Two hours; throughout the year. (Hill.)

**142. The Social Message of the Gospel.** Attention is given to the social teachings of the gospels with special reference to present-day conditions. (See Religious Education 142.) Two units; second semester. (Montgomery.)

**160. Field Work for Training Social Workers.** The student is given opportunity to do field work in connection with certain of the organized welfare agencies of Los Angeles. The field work is under the joint supervision of practical workers and of the department of sociology. Regular written reports are required. Two units; throughout the year. (Bogardus.)

#### GRADUATE COURSES

**200. Seminar in Sociology.** An advanced course, primarily for graduates, in which the student makes practical applica-



tion of his previous sociological studies. After inquiry into the historical as well as the present status of some leading social problem, both from European and American points of view, the student investigates the concrete local phases of the same question and presents results. Stress is placed upon original research. Two units; throughout the year. (Bogardus.)

**201. Seminar in the Relation of Religion to Social Questions.** Designed to meet the needs of a limited number of religious and social workers and other graduates showing adequate preparation for advanced work in applied sociology. Candidates should make application to the director or to the department. Two units; throughout the year. (Kenngott.)

**205. History of Social Thought.** A history of social thought since earliest times. A comparative study of the early social writers, and of the leading sociologists of the nineteenth century. Extensive library work and frequent reports are among the requirements. Two units; first semester. (Bogardus.)

**206. Contemporary Social Thought.** The contributions of the leading present-day sociologists are considered. Some attention is given to the writings of the leading social workers, as well as to current social thought in the drama, fiction and related fields. Two units; second semester. (Bogardus.)

**210. Sociology Journal Club.** Reviews and criticisms of the most important articles in current sociological journals, including American, English, French, German and Italian publications. One unit; throughout the year. (Bogardus.)

**Major Work in Sociology:** Thirty semester units, including Economics 1.

**Minor Work in Sociology.** Ten semester units.

**High School Teacher's Recommendation:** An undergraduate sociology "major" course, followed by at least seven units of graduate work in sociology. The entire course must include: Economics, Course 1, Principles; and the following courses in sociology: 1, Introductory, or 100, Principles; 103, Immigration; 104, Charities, or 106, Social Insurance; 120, Social Psychology; 200, Seminar in Sociology or 201, Seminar in the Relation of Religion and Social Questions; 205, History of Sociology.

**Social Service Diploma.** Granted to those students who have completed one year's graduate work, including the following requirements, satisfactorily: The entire course must include an undergraduate sociology "major" course, at least ten units of graduate work in sociology, and at least eight hours of field work in connection with regular social welfare institutions (one-half of the field work shall be done in the graduate year.)

The social service diploma certifies to the individual's training, both theoretical and practical, and bears with it a recommendation that the holder is fitted to enter upon professional social service work.

**Sociological Monographs.** The results of the best research work done in the department of sociology will be printed in the "Studies of Sociology," which is a series of sociological monographs published by the Southern California Sociological Society.

## SPANISH

KATHERINE T. FORRESTER, ROY E. SCHULZ, Professors  
ESPERANZA CARRILLO, Instructor

### LOWER DIVISION COURSES

**1a. Elementary Spanish.** The essentials of Spanish grammar, with careful drill in pronunciation, reading, conversation and writing. Five units; either semester. (Schulz.)

**1b.** A continuation of 1a. Five units; either semester. (Schulz, Carrillo.)

**Note**—Not more than five units of Spanish 1 A-B can be credited toward a major course in Spanish.

**2. Advanced Spanish.** The selections in Hill's and Reinhardt's "Spanish Short Stories" are read and discussed in class. Advanced grammar and composition, with Ramsey's "Grammar" as a guide. Three units; first semester. (Forrester.)

**3. Advanced Reading and Composition.** Selections from "Don Quixote" are read with a view to familiarizing the student with typical characteristics in Spanish literature. Collateral reading of selections from "Gil Blas," with reports in Spanish. Advanced grammar and composition. Three units; second semester. (Forrester.)

**4. Spanish Conversation.** An attempt is made to gain a working knowledge of colloquial Spanish on the basis of text books and Spanish magazines. Two units; throughout the year. (Forrester.)

**5. Commercial Spanish.** An attempt is made to gain a business vocabulary and a knowledge of business forms. Two units; second semester. (Forrester.)

#### UPPER DIVISION AND GRADUATE COURSES

**106. Modern Novels and Drama.** Selections from the works of important novelists and dramatists are read and discussed in class and as collateral work, with reports in Spanish. Advanced composition. Three units; first semester. (Forrester.)

**107. Modern Novels and Drama.** A continuation of course 106 with special reference to Spanish life and the Spanish viewpoint. Three units; second semester. (Forrester.)

**108. Nineteenth Century Literature.** A special study of one or more authors. During 1918 a study will be made of Becquer's life and works. Two units; second semester. (Schulz.)

**109. Lyric Poetry.** A rapid survey of Spanish Lyric Poetry, using Ford's "A Spanish Anthology" as a text. Two units; first semester. Alternates with 111; not given in 1917-1918. (Schulz.)

**110. Spanish Prose.** A rapid survey of the history of Spanish Prose. Alternates with 112; not given in 1917-1918.

**111. The Drama of the Golden Age.** A critical study of the period, with the reading and discussion of selections from Lope de Vega, Calderón, and Tirso de Molino. Two units; first semester. (Schulz.)

**112. Modern Drama.** A study of modern and contemporary Spanish Drama with selections from prominent authors. Two units; second semester. (Schulz.)

**113. Advanced Composition.** The translation of long selections, with particular attention to idioms and style. Two units; first semester. (Forrester.)

**114. Current Events.** Discussions in Spanish of current events with particular reference to Spain and Spanish America. One unit; both semesters. (Forrester.)

**115. History of Spanish Literature.** A rapid survey of Spanish Literature. Required of all major students. Two units; second semester. (Schulz.)

PRIMARILY FOR GRADUATE STUDENTS

**214. Teacher's Course.** A study of methods of presenting the four-year high-school course in Spanish, with demonstrations and practice in the University High School. Three units; first semester. Credit not allowed toward a Master's degree. (Schulz.)

**215. Cervantes.** A study of Cervantes' life, time and works. One unit; both semesters. (Forrester.)

**216. Spanish Ballads.** A study of the Spanish romancero, using Morley's "Spanish Ballads" as a text. Collateral reading of Pidal's "El Romancero." One unit; second semester. (Forrester.)

**217. Castilian Phonetics.** A study of the conclusions of Arujo, Joselyn, Colton and Navarro, with a brief comparative study of non-Castilian Spanish. Two units; first semester. (Schulz.)

**218. Old Spanish.** A study of the development of the Spanish language in the earlier period of its history. The equivalent of at least two years of preparatory Latin is a prerequisite. Two units; second semester. (Schulz.)

See also courses listed under Latin American Department.

**Major Work.** Thirty semester units, including courses 113 and 115 and of which only five units may be from course 1A-B.

**Minor Work.** Ten semester units exclusive of course 1, four of which shall be in upper division courses.

**High School Teacher's Recommendation.** Thirty semester units, including courses 113, 115 and 214, of which only five units may be from course 1A-B.

# COURSES IN ENGINEERING

## ARCHITECTURE

D. C. ALLISON, REXFORD NEWCOMB, H. SCOTT GERITY,  
A. C. WEATHERHEAD, Professors

A four year general course leading to the degree of B. S. in Architecture. The course includes the theory and practice of architectural design, the history of architecture, and the principles of architectural engineering.

### REQUIRED COURSE IN ARCHITECTURE

#### First Year

	Units. 1st Sem.	Units. 2nd Sem.
Mathematics, 4, 5, 6 .....	5	5
Physics, 2, 3, 4, 5, 6, 7, 8, 9.....	6	6
English, 1 .....	3	3
Drawing, 1—Mechanical Drawing.....	2	....
Drawing, 8—Shades and Shadows.....	....	2
Architecture, 1—Freehand Drawing.....	2	2
Architecture, 8—Elements of Architecture....	1	1

#### Second Year

	Units. 1st Sem.	Units. 2nd Sem.
Mathematics, 7, 108.....	3	3
German or French.....	5	5
Art and Design, 4—Drawing from Life.....	....	1
Drawing, 6—Descriptive Geometry.....	2	2
Drawing, 9—Architectural Perspective.....	....	2
Civil Eng., 13—Materials of Construction.....	3	....
Architecture, 5—History of Architecture.....	3	3
Architecture, 10—Architectural Drawing.....	1	1
Architecture, 15—Elementary Architectural Design .....	2	2



## Third Year

	Units. 1st Sem.	Units. 2nd Sem.
Civil Eng., 107, 108—Mechanics and Strength of Materials .....	5	5
Civil Eng., 115—Graphic Statics.....	1	....
Civil Eng., 116—Stresses in Steel Structures.. ....	....	3
Civil Eng., 118—Structural Design.....	....	2
Architecture, 2—Water Color.....	1	1
Architecture, 3—Pen and Ink Rendering.....	....	1
Architecture, 100—Building Illumination and Acoustics .....	3	....
Architecture, 101—Sanitation.....	2	....
Architecture, 106—History of Architecture....	3	3
Architecture, 107—History of Ornament.....	1	1
Architecture, 116—Intermediate Architectural	3	3

## Fourth Year

	Units. 1st. Sem.	Units. 2nd. Sem.
Art and Design, 9—Clay Modeling.....	....	1
Civil Eng., 118—Structural Design.....	3	....
Civil Eng., 121—Reinforced Concrete.....	3	3
Architecture, 110—Professional Practice.....	1	1
Architecture, 102—Heating and Ventilating..	6	6
Architecture, 120—Thesis .....	1	3

## COURSES IN ARCHITECTURE

**1. Freehand Drawing.** Drawing from geometrical solids in pencil and charcoal. Lectures on the principles and processes of freehand drawing. Charcoal and wash drawings of architectural ornament from plaster casts. Drawing from parts of existing buildings. Six hours, two units; throughout the year. (Weatherhead.)

**2. Water Color.** Drawing and rendering of architectural subjects in water color. The principles of color harmony. Out-of-door sketching in water color. Three hours, one unit; throughout the year. (Leaver.)

**3. Pen and Ink Rendering.** Rendering of architectural subjects in pen and ink. Three hours, one unit; second semester. (Titus.)

**5. History of Architecture.** A course tracing the development of building from the earliest times down to the beginning of the Renaissance. Lectures and sketch problems. Three units; throughout the year. (Newcomb.)

**8. Elements of Architecture.** A study of the elements of the best examples of Classical Architecture, practice in rendering, and simple designing. Three hours, one unit; throughout the year. (Gerity.)

**10. Architectural Drawing.** Architectural lettering, detailing, and the preparation of working drawings. Three hours, one unit; throughout the year. (Weatherhead.)

**15. Elementary Design.** A series of monthly rendered problems involving the application of elementary architectural forms as given in course 8, and the principles of planning and designing. Two units; throughout the year. (Allison and Gerity.)

**100. Building Illumination and Acoustics.** A course in the theory and methods of lighting buildings, electric lamps and other illuminants, wiring, etc. The principles of architectural acoustics and their application to the designing of interiors. Three units; first semester. (Nye.)

**101. Sanitation.** The principles of sanitation. The methods of sewage disposal. Modern plumbing systems and fixtures. Two units; first semester. (Lawrence.)

**102. Heating and Ventilating.** The theory and practice of heating and ventilating buildings, including a study of the various modern systems. Two units; second semester.

**106. History of Architecture.** A continuation of course 5 tracing the development of architectural forms from the Duomo of Florence to the present day. Lectures and sketch problems. Three units; throughout the year. (Newcomb.)

**107. History of Ornament.** Lectures and sketch problems tracing the development of ornament from early times to the present day. Original designs required in the principal historic periods. Prerequisite—Architecture 5, or Art and Design 12. One unit; throughout the year. (Newcomb.)

**110. Professional Practice.** A study of the relations between the architect and his client, the owner, and the contractor. Contracts and specifications. Building ordinances. One unit; throughout the year.

**116. Intermediate Design.** A continuation of course 15. Three units; throughout the year. (Allison and Gerity.)

**117. Advanced Design.** Extended problems in original design. Six units; throughout the year. (Allison and Gerity.)

**120. Thesis.** An advanced study of some special problem in architectural designing. One unit, first semester; three units, second semester. (Allison.)

## CIVIL ENGINEERING

CHARLES W. LAWRENCE, Professor

C. W. COOK, Associate Professor

The great industrial development of recent years in every part of the United States has created a large demand for trained civil engineers. The course in Civil Engineering has been made broad in order to meet this demand by providing a sufficient foundation for the wide range of practice now included under Civil Engineering.

Very few college students know in what part of this wide field their life work will lie. Because of this, and the great difficulty of mastering fundamentals during the stress of professional work, it has seemed best to provide a broad university preparation and to defer specialization to the period of active employment.

The course is designed to give a practical as well as a theoretical training. Nearly as much time is spent in the drawing room, laboratory and field as in the lecture room.

By consulting the schedule following, it will be seen that considerable time is devoted to Mathematics, English, and the Sciences. Of the more technical work, Field Engineering is given very full treatment in lecture room, office and field.

In the third year Theoretical Mechanics is thoroughly developed and forms the basis for the designing and construction that occupy the remainder of the course. The importance of correct methods of thought and practice is constantly insisted upon.

A very large amount of important engineering work is continually going on in the vicinity of Los Angeles. The proximity of harbors, mines, irrigation and water supply projects, several transcontinental railroad terminals, and extensive electric power plants and railway systems, offers a diversity of excellent examples of engineering construction.

Students in this department, accompanied by instructors, are required to inspect much of this work and to present written reports on what they have seen.

## REQUIRED COURSE IN CIVIL ENGINEERING

### First Year

	FIRST SEMESTER	Lab. Class	
		Hours.	Hours.
Mathematics, 4, 5—Algebra and Trigonometry.....	....	4	....
Physics, 2—Mechanics .....	....	3	....
Physics, 3 .....	3	....	....
Civil Engineering, 1—Surveying Theory.....	....	2	....
Civil Engineering, 2—Field Work.....	6	....	....
Drawing, 4 .....	6	....	....
English, 1 .....	....	3	....

### SECOND SEMESTER

Mathematics, 6—Analytical Geometry.....	....	5	....
Physics, 6—Electricity .....	....	3	....
Physics, 7 .....	3	....	....
Civil Engineering, 1.....	....	2	....
Civil Engineering, 2.....	6	....	....
English, 1 .....	....	3	....
Drawing, 5 .....	6	....	....

### Second Year

#### FIRST SEMESTER

Mathematics, 7—Differential Calculus.....	....	3	....
Geology, 2—Mineralogy .....	....	2	....
Civil Engineering, 13—Materials.....	....	3	....
Drawing, 6—Descriptive Geometry.....	3	1	....
Physics, 4—Heat .....	....	2	....
Chemistry 2—Qualitative Analysis.....	....	3	....
Chemistry, 2a .....	6	....	....

#### SECOND SEMESTER

Mathematics, 108—Integral Calculus.....	....	3	....
Geology, 2 .....	....	2	....
Civil Engineering, 3—Advanced Surveying.....	6	2	....
Drawing, 6—Descriptive Geometry.....	3	1	....
Physics, 8—Light .....	....	2	....
Chemistry, 3 .....	....	3	....
Chemistry, 3a .....	6	....	....

**Third Year****FIRST SEMESTER**

	Lab. Hours.	Class Hours.
Civil Eng., 107—Analytical Mechanics .....	3	3
Civil Eng., 108—Mathematics of Materials.....	2	2
Civil Eng., 115—Graphical Statics .....	3	3
Civil Eng., 104—R. R. Engineering Theory.....	2	2
Civil Eng., 105—R. R. Engineering Practice.....	6	6
Elect. Eng., 4—Steam Engineering.....	2	2
Elect. Eng., 101a.....	5	5

**SECOND SEMESTER**

Civil Eng., 107 .....	2	2
Civil Eng., 108 .....	3	3
Civil Eng., 116—Stresses .....	3	3
Elect. Eng., 5—Steam Engineering.....	2	2
Civil Eng., 109—Hydraulics .....	3	3
Civil Eng., 105-106—R. R. Engineering.....	3	2
Civil Eng., 118—Structural Design .....	6	6

**Fourth Year****FIRST SEMESTER**

Civil Eng., 121—Reinforced Concrete .....	3	2
Civil Eng., 118—Structural Design .....	6	1
Geology, 105 .....	2	2
Mathematics, 112—Astronomy .....	2	2
Civil Eng., 111—Water Supply .....	2	2
Civil Eng., 112—Sanitary Engineering .....	2	2
Civil Eng., 110—Irrigation Engineering .....	1	1
Economics, 1 .....	3	3
Civil Eng., 123—Thesis .....	3	3

**SECOND SEMESTER**

Civil Eng., 118 .....	6	6
Geology, 105 .....	2	2
Civil Eng., 121—Reinforced Concrete .....	3	2
Civil Eng., 122—Contracts and Specifications.....	1	1
Civil Eng., 119—Highway Engineering .....	2	2
Civil Eng., 123—Thesis .....	6	6
Economics, 1 .....	3	3
Civil Eng., 117—Eng. Lab. ....	3	3
Engineering Seminar .....	3	3



**COURSES IN CIVIL ENGINEERING****LOWER DIVISION COURSES**

**1. Surveying.** Recitations and lectures on the theory and practice of plane surveying. The course includes the use and care of instruments; methods of procedure and of keeping notes for land, city, and mining surveys; instructions in computation and platting of field notes. Prerequisite, a course in plane trigonometry. Two units, throughout the year. Text, Breed and Hosmer's "Principles and Practice of Surveying." Vol. 1. (Cook.)

**2. Surveying Field Work.** The practical adjustment of surveying instruments; the proper method of keeping clear field notes, and the working of field problems with chain, tape, level, plane table, transit, compass, etc. The work in the drawing room consists of platting the field notes and making profiles and maps. Six hours, two units, throughout the year, course 1 to be taken concurrently. Text, "Pence and Ketchum's Field Manual." (Cook.)

**3a. Higher Surveying.** Recitations and lectures on the theory and practice of the more advanced surveying problems, including hydrographic surveying, and mapping. Prerequisite, courses 1 and 2. Two units; second semester. Text, Breed and Hosmer, Vol II. (Cook.)

**3b. Higher Surveying, Field Work.** Topographical surveys with plane table and stadia, city surveys, mine surveys, measurement of base lines and triangulation systems, determination of meridian and latitude. Prerequisite, course 1 and 2. Six hours' field work, two units. (Cook.)

**13. Materials of Construction.** A study of the manufacture and properties of stones, cements, concretes, timber, iron, steel, etc., with special attention to the determination of the safe working stresses. Three units; first semester. Text, Mills' Materials of Construction. (Cook.)

**UPPER DIVISION COURSES**

**104. Railroad Engineering.** A course including the theory of curves, switches, and sidings; the making of reconnaissances and preliminary and location surveys; the computation of earthwork and determination of structures; and the making of final estimates of cost. Prerequisites, course 1 and 2. Two units; first semester. Text, "Allen's Railroad Curves and Earthwork." (Cook.)

**105. Railroad Engineering, Field and Office Work.** Practice in laying out curves, making a complete survey for a short line of railway, and doing the office work. Course 104 must be taken concurrently. Eight hours, three units, first semester; three hours, one unit, second semester. Text, "Allen's Railroad Curves and Earthwork." (Cook.)

**106. Economics of Railroad Location.** The fundamental principles of economical location, construction and betterment surveys; a discussion of yard and terminal design; the study of the permanent right of way in regard to its relation to maintenance and operation. Prerequisite, course 104. Two units; second semester. Text, "Raymond's Railroad Engineering." (Cook.)

**107. Analytical Mechanics.** The mathematical treatment of statics, kinematics and dynamics, including the determination of center of gravity, moment of inertia, centrifugal force, etc. Prerequisite, Mathematics 7 and 108. Three units, first semester; two units, second semester. Text, "Hancock's Applied Mechanics for Engineers." (Lawrence.)

**108. Strength of Materials.** A mathematical course in the resistance and elasticity of materials, stresses and strains, shearing, flexure, beams, columns, and shafts. Course 107 must be taken concurrently. Two units, first semester; three units, second semester. Texts, Slocum and Hancock's "Strength of Materials," and Shepard's "Problems in Strength of Materials." (Cook.)

**109. Hydraulics.** Hydraulic pressure, strength of pipes, flow of liquids through pipes and orifices and over weirs, losses of head, flow of water in open channels, dams of masonry and earth, hydraulic motors and machinery. Prerequisite, course 107. Three units, second semester. Text, Slocum's Hydraulics." (Lawrence.)

**110. Irrigation Engineering.** Diversion, conveyance, and application of water for irrigation. Design of reservoirs, dams and diversion work. One unit; first semester. Text, Newell and Murphy's "Irrigation Engineering."

**111. Water Supply.** The determination of the quantity and quality of supply, water purification and conservation, design of a system. Prerequisite, course 109. Two units; first semester. Text, Turneaure and Russel's Public Water Supplies." (Lawrence.)

**112. Sanitary Engineering.** The drainage of buildings, treatment and disposal of sewage, sewer systems for cities. Prerequisite, course 109. Two units; first semester. Text, "Sewage Disposal, Kinnicutt, Winslow and Pratt." (Lawrence.)

**115. Graphical Statics.** The graphical determination of the stresses in engineering structures. Course 107 must be taken concurrently. Three hours, one unit; first semester. Lectures and Drafting. (Lawrence.)

**116. Stresses in Framed Structures and Arches.** The analytical and graphical methods applied to determining stresses in roof and bridge trusses and masonry arches. Prerequisite, courses 107 and 115. Three units; second semester. Text, Turneaure's *Modern Framed Structures*, Vol. 1. (Lawrence.)

**117. Engineering Laboratory.** The testing of engineering materials. Prerequisite, course 108. Three laboratory hours, one unit; second semester. Work done at the Osbourn Testing Laboratory (by special arrangement.)

**118. Structural Design.** The theory for and practice of making complete designs for steel bridges, roofs and other structures. Lectures, drawing, and computing. Prerequisite, courses 108 and 116. One hour lecture, six hours drafting, three units. Text, "Modern Framed Structures," Vol. III. (Lawrence.)

**119. Highway Engineering.** Roads and streets of broken stone, paved and oiled roads, the location of new roads. Two units; second semester. Text, "Baker's Roads and Pavements." (Lawrence.)

**121. Reinforced Concrete.** The theory, design, construction and estimates of concrete and reinforced concrete structures, including buildings, foundations, retaining walls, tunnels, culverts, dams. Two hours lecture, three hours designing, three units; throughout the year. Text, Hool's "Reinforced Concrete Construction," Vol. I and II. (Cook.)

**122. Contracts and Specifications.** A synopsis of the law of contracts as applied to engineering construction and a study of typical contracts and specifications. The course includes riparian rights, boundary lines, survey descriptions, etc. One unit; second semester. Text, Tucker's "Contracts in Engineering." (Lawrence.)

**123. Thesis.** A study of some special engineering problem or an independent investigation by the student. The subject must be approved by the professor in charge of the department of Civil Engineering and by the professor who would have immediate direction of the work proposed, not later than November 1st of the senior year. It must be completed and submitted by June 1st of the same year. One unit, first semester; two units, second semester. (Lawrence.)

#### GRADUATE COURSES

**218. Structural Engineering.** The theory and design of continuous girders, swing, cantilever, suspension of metallic arch bridges. Two units, each semester. Text, "Modern Framed Structures," Vol. II. (Lawrence.)

**221. Advanced Reinforced Concrete.** The theory and design of reinforced concrete bridges, arches, tunnels and chimneys. Two units credit. Text, Hool's "Reinforced Construction," Vol. III. (Cook.)

**224. Theory and Method of Least Squares.** The application of the laws of errors to the adjustment of observations. Two units, one semester. Text, Weld's "Theory of Errors and Least Squares." (Lawrence.)

## ELECTRICAL ENGINEERING

ARTHUR W. NYE, J. H. MONTGOMERY, Professors  
AUGUST HUND, Assistant Professor

The courses offered in this department are designed to fit young men to engage in the operation and production of electrical apparatus, and also in the application of electricity to the Arts and Sciences.

During the freshman and sophomore years there is laid a broad foundation, consisting of Physics, Mechanics, Chemistry, Surveying, and Drawing. During the junior and senior years special studies in electricity and applied electricity are pursued. These involve the theory of electricity and magnetism with application to direct-current machines and measuring instruments, and alternating-current machinery and apparatus, comprising alternators, synchronous and induction motors, transformers and rotary converters. Courses are also given in Electrical Distribution and Transmission, Illuminating Engineering and Hydraulic Engineering.



The work of the engineering laboratories is co-ordinate with that of the lecture and class room, and aims to give a practical knowledge of electrical measurements and the handling of electrical machinery.

Southern California, in its present state of rapid development, offers exceptional opportunity to the hydraulic and electrical engineer. The work of the University is excellently supplemented by the large amount of work under construction. The engineers and superintendents in charge of these have been very courteous in aiding the classes on their various trips of inspection. The various power and electric plants in and about Los Angeles afford examples of electric development of high-tension and power transmission not surpassed by those of any other city in the United States. Various excursions are made to these plants, which are explained in detail by the superintending engineers.

## REQUIRED COURSE IN ELECTRICAL ENGINEERING

### First Year

#### FIRST SEMESTER

Lab. Class  
Hours. Hours.

Mathematics, 4, 5—Algebra, Trigonometry.....	5	
Drawing, 4 .....	6	....
Physics, 2—Mechanics .....		3
Physics, 3 .....	3	....
English, 1 .....		3
Civil Eng., 1—Surveying, Theory .....		2
Civil Eng., 2—Surveying, Field .....	3	....

#### SECOND SEMESTER

Mathematics, 6—Analytical Geometry .....		5
Drawing, 5.....	6	....
Physics, 6—Electricity .....		3
Physics, 7 .....	3	....
English, 1 .....		3
Civil Eng., 1.....		2
Civil Eng., 2.....	3	....



## Second Year

## FIRST SEMESTER

Lab. Class  
Hours. Hours.

Physics, 4, 5—Heat.....	3	2
Physics, 21—Shop .....	3	...
Elect. Eng., 4—Steam Engineering.....	...	2
Civil Eng., 13—Materials.....	...	3
Mathematics, 7—Differential Calculus.....	...	3
Drawing, 6—Descriptive Geometry.....	3	1
Chemistry 2—Qualitative Analysis .....	...	3
Chemistry, 2a .....	6	...

## SECOND SEMESTER

Physics, 8, 9—Light .....	3	2
Physics, 21—Shop .....	3	...
Elec. Eng., 5—Steam Engineering.....	...	2
Physics, 16—Electricity .....	...	2
Chemistry, 3 .....	...	3
Chemistry, 3a .....	6	...
Mathematics, 108—Integral Calculus.....	...	3
Elec. Eng., 111—Workshop Mechanics.....	...	1
Physics, 17—Physical Measurements.....	3	...

## Third Year

## FIRST SEMESTER

Elec. Eng. ....	...	5
Physics, 105—Electrical Measurements.....	6	...
Civil Eng., 107, 108—Mechanics.....	...	5
Physics, 114—Thermodynamics .....	...	1
Elec. Eng., 106—Excursions.....	2	...
Physics, 112—Illumination .....	...	3

## SECOND SEMESTER

Elec. Eng., 101a.....	...	5
Elec. Eng., 102—Dynamo Laboratory.....	6	...
Civil Eng., 107, 198—Mechanics.....	...	5
Elec. Eng., 106—Excursions.....	2	...
Drawing, 7—Machine Design .....	...	3

## Fourth Year

## FIRST SEMESTER

Elec. Eng., 103a—Alterating Currents .....	5
Elect. Eng., 107—Dyn. Lab. A. C. Mach.....	6
Elect. Eng., 108—Theory of Electricity.....	2
Elect. Eng., 112—Thesis .....	3
Economics, 1 .....	3
Elec. Eng., 106—Excursions.....	2

## SECOND SEMESTER

Elect. Eng., 103b—Alternating Currents .....	3
Elect. Eng., 109—Electric Railroads.....	2
Elect. Eng., 107—A. C. Lab.....	6
Civil Eng., 109—Hydraulics .....	3
Elect. Eng., 112—Thesis.....	3
Economics, 1 .....	3
Elect. Eng., 106—Excursions .....	2
Elect. Eng., 110—Transmission .....	2

## COURSES IN ELECTRICAL ENGINEERING

## LOWER DIVISION COURSES

**4. Steam Engineering.** Boilers, combustion, fuels, laws of gases and heat-conduction, corrosion and scale, testing, flow of steam in pipes, etc. Practical apparatus as used in steam power plants. Two units; first semester. (Montgomery.)

**5. Steam Engineering.** A study of various types of steam turbines and steam engines, indicator cards, valve motions and diagrams, multiple expansion, design of parts. General layout of plants. Two units; second semester. (Nye.)

## UPPER DIVISION COURSES

**101a. Dynamo Electric Machinery.** This course comprises a study of the theory and operation of direct-current generators and motors. Text: "Elements of Electrical Engineering," Vol. I, by Franklin and Esty. Five units; first semester. (Nye.)

**101b. Dynamo Electric Machinery.** This course comprises a study of electric distribution and lighting and the elementary principles of Alternating Currents. Five units; second semester. (Nye.)

**102. Dynamo Laboratory.** Study is made of the performance of direct-current machines by means of their characteristic curves; efficiency, regulation, and heat tests are run; and various methods of operating generators and motors and their auxiliary control apparatus are studied. Junior year. Six hours, two units; second semester. (Hund.)

**103a. Alternating Currents.** A mathematical study of the theory and applications to modern machinery. Study of text and lectures. Text: "Alternating Currents and Alternating Current Machinery," by Jackson. Five units; first semester. (Hund.)

**103b. Alternating Currents.** Continuation of 3a. Three units; second semester. (Hund.)

**106. Excursions.** Trips to various power plants and factories with a view to observing methods and processes. Written reports required of students.

**107. Dynamo Laboratory.** Tests and study of alternating current apparatus. Senior year. Six hours, two units; throughout the year. (Hund.)

**108. Theory of Electricity.** The electrical units and their dimensions; laws of circuits; theories of electric conduction in solids, gases, and electrolytes; valve actions; etc. Two units; first semester. (Hund.)

**109. Electric Railroads.** Railway engineering, power-plant engineering, water-power installation, economics of electrical engineering, etc. Two units; second semester. (Montgomery.)

**110. Transmission and Station Equipment.** A study of the commercial problems of electric-power generation and distribution, and of standard polyphase machinery. Two units; second semester. (Nye.)

**111. Workshop Mechanics.** A consideration of the materials of machine construction, of the methods of working them, and of workshop appliances. Lectures, no credits, but required of all graduates in Electrical Engineering. (Montgomery.)

**112. Thesis.** An original investigation and study of some special problem.

Only senior students who show themselves peculiarly fitted to undertake this work will be allowed to enroll for it. Other students will take Physics 202 and 203 in lieu of Thesis.

**Note**—For courses in Electrical Engineering that can be accepted toward the degree of Bachelor of Arts, see Engineering Courses in Arts.

## MINING AND CHEMICAL ENGINEERING

LAIRD J. STABLER, L. S. WEATHERBY, Professors

The University is at present offering two years of the course in Mining and Chemical Engineering. The work, as outlined, gives thorough training in the fundamental subjects of mathematics, chemistry, physics, drawing, and the elements of engineering. The foundation laid in the two years prepares the student to enter any of the good mining colleges, and complete the work of the Junior and Senior years, 'specializing in Mining and Metallurgy.

Students who desire to complete their full course at this University may, by satisfying the requirements in Liberal Arts, select their further courses from the Department of Chemistry, and from the engineering courses for which credit is given in Liberal Arts, and be graduated as majors in Chemistry.

### Courses in Mining or Chemical Engineering

#### Freshman Year

	First Semester	Second Semester
English, 1 .....	3	4
Mathematics, 4, 5, 6.....	5	5
Chemistry, 2, 2a, 3, 3a.....	5	5
Civil Engineering, 1 .....	2	2
Civil Engineering, 2 (Field Work).....	2	2
Drawing, 4, 5.....	2	2

#### Sophomore Year

Mathematics, 7, 108—Calculus.....	3	3
Geology, 3—Ores and Metals.....	2	2
Drawing, 3—Elements of Perspective.....	1	1
Drawing, 6 .....	3	3
Physics, 2, 3, 6, 7.....	6	6
Chemistry, 4, 108.....	4	4

**Note**—For courses in Mining and Chemical Engineering that can be accepted toward the degree of Bachelor of Arts, see **Engineering Courses in Arts**.

## GENERAL INFORMATION

The College of Liberal Arts of the University of Southern California is situated in Los Angeles, about three and one-half miles southwest from the business section of the city. The College buildings are accessible by three lines of street cars, the West Jefferson Street, the University, and the Pacific Electric lines. This is one of the most beautiful and rapidly growing residence sections of Los Angeles.

### EQUIPMENT

**The Library** is housed in the main building of the University. The reference room contains the general reference books, the bound magazines, and a carefully selected list of current periodicals. The stack room contains the circulating books. The collateral reading rooms occupy the entire first floor of the north wing and provide ample space for study and research work.

All officers, students, and graduates of the University have free access to the library and may draw books for home use. The shelves are open to members of the Faculty and, upon recommendation of their major professors, to students engaged in advanced work.

The Library contains over eighteen thousand volumes, exclusive of unbound pamphlets, and also the Dean Cochran Memorial Library of over two thousand volumes placed in the University by his son, George I. Cochran. Many new volumes are added each year to meet the demands of the various departments.

The Library is open five days in the week from 7:50 A. M. to 5:30 P. M., and from 7:00 to 9:00 P. M.; on Saturdays from 8:30 A. M. to 3:30 P. M.

The Los Angeles Public Library of over 150,000 volumes is a most valuable supplement to the facilities offered by the University Library, and is accessible to all students. The University Library is a depository of the Public Library, and books as needed are brought from the Public Library for the use of the students. Books also are borrowed from public and college libraries in the state through the Los Angeles County Free Library.



**The Museum** contains an extensive collection of specimens in mineralogy and geology, which have been accumulated during the past years by donation and purchase. This collection has been classified and arranged so as to illustrate the daily work of the classes in geology and mineralogy. The museum contains the collection purchased from Dr. Stephen Bowers; and those donated by the late Rev. C. R. Pattee, Mrs. Mary Wright, and Professor Dickinson. These private collections are specially rich in archaeological and conchological material.

All who donate specimens to this department will receive due acknowledgment on the labels.

**Civil Engineering Laboratory for Testing Materials.** For the purpose of conducting series of tests in the strength of materials used in engineering construction, arrangements have been made for the use of the apparatus of the Raymond Osborn Testing Laboratories located in the Marsh-Strong building. The equipment of this laboratory is as complete as any on the Pacific coast. Included in the apparatus is a 200,000 pound Olsen tensile and compression machine, a cold bending machine, two cement testing machines with the necessary immersion tanks and moist closets, sand analysis apparatus and all the minor appliances for carrying on scientific tests of materials.

**Physical and Electrical Engineering Laboratories.** The Departments of Physics and Electrical Engineering occupy eleven rooms on the first floor of the Main Building and the north wing. These have been planned and equipped exclusively for the department and are well suited to the purposes for which they are used. Ample laboratory space is provided and equipped for experimental work in elementary and advanced physics, optics, photometry, electrical measurements, and direct and alternating currents and high frequency measurements.

The apparatus and instruments are modern and of the best quality. The equipment in Mechanics includes a number of excellent precision pieces by Gaertner; in Heat, apparatus by Pye of Cambridge, England; in Light, interferometer, spectrometers, prisms, gratings, etc., by Gaertner, Wilson, and Kohl.

In Electricity the equipment is especially complete. Special mention may be made of standard resistances, postoffice boxes, slidewire bridges, potentiometer by Leeds and North-

rup, portable galvanometers, type H galvanometers, Thompson dynamometer, tangent galvanometers, standards of self-induction, sechometer, permeameter, and variable condensers. There is also an unusually complete assortment of indicating meters for both direct and alternating currents, including voltmeters, ammeters, and wattmeters of various ranges, mostly made by Weston; also Whitney hot wire, Wagner induction, Hoyt torsion head, Ayrton and Perry plunger type, General Electric magnetic vane, and S. H. frequency.

The dynamo room is equipped with a number of direct and alternating current machines of various types. There is a 7.5-Kw. General Electric revolving-field alternator with special winding for various phase and voltage connections. This machine has, also, three extra rotors so that it may be run as an induction motor with squirrel-cage rotor, with an external resistance rotor, or with an internal resistance rotor. It may also be run as a synchronous motor.

The 7.5-Kw. Westinghouse double current generator may be used as a 1, 2, or 3-phase alternator, or as a 125-volt D. C. generator, or as a rotary converter.

In addition to these machines there are also, a 1.5 Kw. Crocker-Wheeler generator, a 1.5-Kw. Edison D. C. generator, an 800-watt Westinghouse D. C. generator, a 7.5-Kw. Fairbanks-Morse 125-volt D. C. generator, Westinghouse 1 and 5-horsepower induction motors, and General Electric 1 and 3-horsepower induction motors, the latter with the phases wound in different colors and brought out to a terminal board so that various connections may be made.

The necessary rheostats, water-rheostats, transformers, controllers, and compensators are provided. Circuits run to the electrical measurements room and lecture room, and one of the motor generator sets is arranged for operation in the lecture room for demonstration purposes. A stereopticon with slides showing modern electric installations is provided.

The photometer room is equipped with a Schmidt and Haensch station-photometer of the Lummer-Brodhun contrast type, with accessories; and also with a Sharp-Millar portable photometer, standard lamps, color screen, five foot integrating globe photometer, etc.

The wireless and high frequency equipment contains one 2-Kw. high-voltage transformer, a high-capacity oscillation transformer, a high potential condenser (three units), and a break-key for sending. The unit receiving set consists of six mineral detectors, two Fleming audions, a loose-coupled ex-

perimental detector, a tuning transformer, and two latest type condensers. There are also wave meters, hot wire meters, various types of spark gaps, several types of tuning and resonance coils, several sources of high frequency currents, etc.

In the machine shop are provided tools for repair work and training in shop practice. These include a twelve-inch engine lathe, a speed lathe, a drill press, taps, dies and drills, and bench tools for wood and metal work.

The Library contains a large number of reference books on many special subjects in Electrical Engineering and General Physics.

**The Biological Equipment.** The entire second floor of the new north wing of the main building is devoted to the biological laboratories and lecture room. The four laboratories with their 110 feet of desks facing immediately to the north, are so planned that each student has abundant light. Each student is supplied with two drawers and a microscope locker, each with Craig combination-locks. Specifically, the equipment of the four laboratories is as follows:

**The Zoological Laboratory**, 34x35 feet, contains forty-seven single desks and a large demonstration table 4x11 feet, with drawers and cupboards on each side for supplies. The laboratory is provided with an aquarium, a drip for keeping live specimens, glass cases for books, reagents and specimens, etc. Each student is furnished a compound microscope, BA 2 or BB2, dissecting instruments, and the necessary materials for dissection and study.

A Bausch and Lomb physician's type of microscope has been presented to the department by Mrs. Scherer in memory of her husband, the late Dr. Luther D. Scherer. The instrument is provided with a complete set of lenses and accessories as follows: 1-12 inch oil-immersion objective,  $\frac{1}{8}$  inch objective with compensating collar, and  $\frac{3}{4}$  inch objective, two eye pieces, substance condenser, stage micrometer, eye-piece micrometer and other accessories.

**The Botanical Laboratory** is thirty by forty-five feet. It contains forty-eight single desks with drawers and lockers, and Craig combination-locks for each; a large demonstration table; cases for herbarium specimens, books, and supplies; blackboards, sinks, aquarium, and drip. A compound microscope, dissecting instruments, and materials for study are furnished each student.

For the study of Plant Physiology the laboratory is very well equipped. This equipment consists of recently improved types of apparatus for experimental work, and includes the Cambridge Improved Auxanometer, which is self-recording; Ganong's Clinostat, Cambridge Circumnutationometer, Detmer's Gas Diffusion Apparatus, Pfeffer's Gas Apparatus, Oel's Geotropic Chambers, Freas' Osmometer, Pfeffer's Photosynthometer, Cambridge Photosynthescope, Ganong's Photometer, Cambridge Respirator, several Manimeters, a self-recording Transpirometer, and a number of other pieces of apparatus for working out the processes of the living plant. For research work in Botany the latest improved microscopes with oil-immersion objectives, camera lucida, warm temperature stage, micrometers, and other accessories are provided.

The Library contains a large number of books and magazines on Botany and the latest contributions to Botanical literature.

**The Laboratory for Bacteriology and Physiology** is 29x46 feet, facing the north. It is supplied with autoclave, Arnold, and hot-air sterilizers, incubators, glassware, and all other necessary equipment for work in bacteriology. There are thirty-one single desks in this laboratory, a large demonstration table, two hoods and a cooling chamber, a sink, a tank, tables, cupboards, and a case of reagents and supplies. All the necessary materials, apparatus and instruments, including BB-8 Bausch and Lomb microscopes, are furnished the student. For Physiology the laboratory is supplied with the reagents and apparatus necessary for successful laboratory work, such as microscope, haemocytometer, dissecting instruments, etc. A complete set of the Harvard Physiological apparatus has been added. For Histology and Embryology the student is supplied with BB-8 microscope and has the use of the Minot automatic rotary microtome, Bausch and Lomb's automatic laboratory microtome, and all reagents necessary to carry on successful work.

**The Biological Research Laboratory**, 15x17 feet, adjoins the office of the department, which is also 15x17 feet. The equipment of these rooms is such as adapts them to advanced work along special lines. The best microscopes of German and American make are available, including Bausch and Lomb, CC-8 Zeiss IIa, with achromatic and a set of apo-chromatic objectives with compensating eye-pieces. Other microscopes of the Leitz and Spencer types, imbedding baths, centrifuge, camera, and numerous microscope accessories and instruments are provided.



The **Biological Lecture Room** is 32x36 feet with raised seats. It has a seating capacity of about two hundred and is provided with skylight and fitted with screens for darkening to adapt it to the use of the electric projection apparatus and stereopticon that form part of the equipment. The lecture desk, which is fitted with drawers and cupboards, can be adjusted instantly for gas or water for demonstration purposes, this room, as well as all others, is well supplied with electric lights.

The wide halls have been provided with glass cases in which are placed a large collection of birds, mollusks, and alcoholic specimens for demonstration and study. The collection of mollusks is very complete, representing over eighteen thousand specimens.

The **Marine Biological Station of the University of Southern California** is housed in the aquarium and auditorium buildings at Venice. The research laboratory has places for eight investigators, and the combined laboratory and lecture room for the summer course in marine biology will accommodate forty students. In the large aquarium room there are forty aquaria with sides of plate glass and one large central concrete basin. A library and a reference collection of the local fauna and flora are being established.

The Venice pier and breakwater have been made a biological reservation by a special act of the Venice city trustees. Here are colonies of abalones and other animals brought from a distance for study and experimentation. One and one-half miles of canal, with water of lower salinity than the neighboring sea, give opportunity for acclimitization experiments.

In the Pacific Ocean the immediate field of investigation embraces the Santa Barbara Islands, extending from San Clemente, eighty miles to the south, to San Miguel, one hundred and thirty miles to the west. The inshore waters are shallow, reaching the one hundred fathom line ten miles directly seaward to the southwest, a depth of three hundred and fifty fathoms about five miles beyond. At sixty miles from Venice, somewhat to the west of Santa Barbara Island, lies an oval basin twenty miles long and ten miles in width, having a depth of eight hundred and thirty fathoms. The **Anton Dohrn**, a launch of thirty-five feet over all and of ten feet beam, has been built for the exploration of these waters.

The **Chemical Laboratories** occupy the building in the southern portion of the campus. The laboratories for gen-



eral and qualitative chemistry will accommodate two hundred students;; that for quantitative chemistry forty students; that for organic chemistry twenty-five students. The laboratories are thoroughly equipped with modern laboratory tables, water, gas, apparatus and chemicals; they contain a large number of hoods and all of the conveniences of a modern laboratory. The balance room is a separate room, well lighted and equipped with twelve fine analytical balances. The storeroom is supplied with a large quantity of apparatus and chemicals of the best make. A special research laboratory accommodating twenty-five students is thoroughly equipped with storage batteries for electro-chemistry, and with combustion and special apparatus for determining molecular weight. Another laboratory is equipped for investigations on oil and gas. The equipment consists of still, hydrometers, viscometers, Atwater's bomb calorimeters for heat determination, Junker's patent gas-calorimeters, Hempel's gas apparatus, Elliott's sulphur apparatus, and a thermo-electric pyrometer. There are also two additional research laboratories.

**The Assay and Metallurgical Laboratory** occupies a large room in the Chemistry Building. The equipment consists of rock crushers, ore grinders of several kinds, and amalgamating fans, all driven by electricity. The furnaces are of the latest type, using gas for fuel. The equipment includes apparatus for concentration and amalgamation tests, as well as a complete cyanide and chlorination plant. Special facilities are afforded for the electrolytic reduction processes. The laboratory is modern in every detail.

**The Laboratories for Geology, Mineralogy, and Soils.** The collections of specimens in geology and mineralogy have accumulated during the past years, and have been classified and arranged so as to illustrate the daily work of the classes in these subjects. Among the collections are those donated by the Rev. C. R. Pattee, Mrs. Mary Wright, and Professor Dickinson, and the one purchased from Dr. Stephen Bowers. A collection of one hundred type soils of the state gives opportunity for comparison and study. Laboratory work is carried on in making relief maps to scale to illustrate the geology, physiography, soils, and mineral industries. A laboratory is being equipped for the physical analysis and identification of soils. The Library contains a large and valuable collection of reference works on the geology, mineralogy, physiography, soils and climate of California. The

collection loaned by Professor Bailey includes a complete set of the U. S. geologic folios and soil maps of the State; bulletins on the geology, oil, and mining industries; and many maps, charts, photographs, and lantern slides.

## ATHLETICS AND PHYSICAL TRAINING

The Faculty of the College of Liberal Arts, recognizing that physical training is both hygienic and educative, desires to encourage every reasonable effort in the direction of physical development consistent with well-rounded manhood and womanhood. On its hygienic side physical training should aid the body in all its functions, develop a symmetrical form, correct deformity as far as possible, and afford recreation. In its educative function it should afford the discipline necessary for self-control, both mental and moral. Athletic sports are encouraged for their value in developing the body, and in furnishing a means of pleasant recreation as well as a source of social and ethical culture.

**Gymnasium and Athletic Grounds.** The gymnasium, the three tennis courts, the basketball court, the inclosed athletic field, with its cinder path, turf football field, and the bleachers with eighty-two hundred sittings, furnish ample facilities for physical training and outdoor sports. In addition to this the University has free use of the limitless facilities provided by the immense athletic field of Exposition Park, situated just three blocks south of the University.

The gymnasium has been fitted with appliances for the proper development of the body. The necessary apparatus of the newest and most approved designs has been provided. The students have all the advantages of the gymnasium, with baths, lockers, and dressing room accommodations. Men and women occupy the building at different periods of the day, and have baths, locker rooms, and dressing rooms in separate wings of the gymnasium building.

A complete equipment is provided for each form of exercise. Galleries will afford audience room for special gymnastic exercises when such are open to the public.

Each student, on entering the department, undergoes a thorough physical examination, in order that his or her physical condition may be known, and suitable exercises prescribed. Various strength tests and measurements are given; the heart, lungs, sight, and hearing are examined; and the

utmost caution is used in the advice given regarding individual exercise. One examination during each semester is required, the latter demonstrating any improvement or change in the student's physical condition. Anthropometric cards and charts are plated for students when desired.

All athletic and team contests are under the close supervision of the director, and no student is permitted to compete in games or contests whose physical examination shows that he or she is unfit.

Any person who desires to enter athletic contests must attain a certain standard of scholarship before being permitted to participate.

## DEBATING

The University provides opportunity for all who wish to engage in debating. During the least season—1915-1916—the schedule of intercollegiate debates included Stanford University, Texas University, Arizona University, Montana University, Pomona College, Occidental College and Denver University. In addition the Freshman teams meet a number of other teams.

Extensive try-outs are conducted early each academic year, and prizes totaling \$60.00 are offered under the auspices of Delta Sigma Rho Fraternity, to the contestants ranking highest in "sincere and effective speaking." These men, together with others properly qualifying, represent the University in regular intercollegiate debate. (See under "Prizes.")

## RELIGIOUS PRIVILEGES

The moral atmosphere surrounding the student is exceptionally good. The Young Men's Christian Association and the Young Women's Christian Association are active and effective in social and religious life. The Y. W. C. A. meets every Tuesday at 9:50 a. m. in East Hall. The Y. M. C. A. meets every Tuesday at 9:50 a. m. in the Chapel. Assemblies are held at 11:40 on Monday, Wednesday and Friday. Attendance is required of all students in the College. In addition to the chapel services, courses of special addresses are delivered from time to time. A student prayer-meeting is held every Thursday at 7 p. m. These privileges constitute a good Christian atmosphere in which to lay the foundation of char-

acter. Students are expected to attend some church each Sabbath, and are advised to join some Sunday class for the study of the Bible.

During the first two weeks of December, 1916, a series of daily evangelistic meetings were held by Dr. C. C. Seelman. The visit of Raymond Robins, February 19 to 21, 1917, was a notable event. In both of these series the claims of Christian life were strongly presented.

The University Methodist Episcopal Church is located near the campus, and is one of the most prosperous churches in the city. The Baptists and Presbyterians and other denominations, also have churches in the near vicinity. These advantages, together with fine public school privileges, make the University section of the city a very desirable place for the residence of families seeking educational opportunities.

## HOUSING

Requirements as to the housing of students living away from home are in the hands of a special Faculty Committee. These must be complied with before the student may be considered settled.

## THE WOMEN'S HALLS

Under the management of the Women's Club, dormitories are provided for young women, where every home comfort and protection is assured to those coming from a distance.

Women students who do not live at home (that is, with parents or legal guardians) are required to live in one of the women's halls. Where exceptions are necessary, either from lack of room in the dormitories or other reasons, written approval of other lodgings must be secured from parents or guardian, and filed with the University.

Room and board (except luncheon Monday to Friday) in the Women's Halls, cost one hundred and ten dollars (\$110.00) per semester, payable in advance. A cash deposit of ten dollars (\$10.00) is required for the reservation of a room. Students are expected to supply their own bed linen.

A student vacating a room before the close of the semester will be charged for room and board until the end of the semester, or until the vacancy has been filled by an incoming student. Therefore, for the benefit of the outgoing student, notice of an intention to withdraw should be given at the earliest possible moment.



No lunch is served at the Women's Hall on school days. All students may secure luncheon at the University Cafeteria on the campus, the expense of which is not included in the above-mentioned fee.

Further inquiries and all applications for rooms should be addressed to Mrs. H. Trowbridge, 1110 West Washington Street, Los Angeles.

## THE WOMEN'S CLUB

A society of ladies interested in the welfare of the students was organized ten years ago under the name of Women's Auxiliary to supplement in all practical ways the plans of the University authorities for the comfort and convenience of the student body. The reception room and the girls' rest room were furnished by their efforts; the women's dormitories are under their supervision; and the University Cafeteria for students and Faculty, under their judicious management is a great success.

There are about one hundred members, and a meeting is held on the second Tuesday afternoon of each month. Mothers of students and ladies interested in the University are cordially invited to become members of this growing organization. Last year the Women's Auxiliary was reorganized as the Women's Club of the University and joined both the State and National Federations of Women's Clubs. In December, 1914, an Alumnae Department was formed, for the purpose of keeping up the interest of the women graduates in the affairs of the University, of supplying a bond of unity for the women now taking graduate work, and of furthering in all possible ways the interests of the University. Only those women who have graduated are eligible to full membership, but any woman who has taken one year's work at the University may become an associate member.

The officers of the Women's Club make the following statement of their chief purpose:

"The present aim of the Club is the erection of a large hall of residence, in place of the rented buildings now being used. The plan is to build around a garden-court, on which all rooms and sleeping porches will open. In this project the Club seeks to enlist the co-operation of every one interested in higher education in the South, irrespective of denominational affiliation."



## STUDENT ORGANIZATIONS AND PUBLICATIONS

There are four literary societies connected with the College of Liberal Arts, the Aristotelian and Comitia for men, and the Athena and Clionian for women. Of these, the Aristotelian and the Athena societies, which date back to the early years of the University, have large and well-furnished halls in which to hold their meetings. All of the societies are in flourishing condition. Once a week each conducts programs consisting of debates, papers, readings, music, discussions on current topics of vital interest, and drill in parliamentary law. Periodically all the societies meet in joint assembly under the auspices of the Civic League for the discussion of problems of civic interest and for the furthering of civic righteousness.

Among the students in the College of Liberal Arts are one national fraternity, two national sororities, six local fraternities, and four local sororities. The aggregate membership is over two hundred. One of the noteworthy features of these societies is their spirit of good-fellowship with those members of the student body who have no such affiliations. The Greek letter societies are under the supervision of a special Faculty committee. A system of grading by the University authorities encourages them to attain a high standard of scholarship.

"The Trojan" is a newspaper managed by a well-organized staff of undergraduates under the direction of the department of Journalism, and devoted to news articles and announcements of events of interest to the University, and to editorial discussions of moment to the student body.

"El Rodeo" is the title of the college annual of descriptive articles, photographs, and cartoons, including all phases of the life in the College of Liberal Arts, and produced by the Junior class of each year.

## FEES AND EXPENSES

Tuition, a semester, payable in advance.....\$50.00

(Special rates will be made to students registering for less than ten hours. **Five dollars** of the above is **registration fee** and is not refundable.)

Diploma Fee, payable 30 days before graduation..... 5.00

## Laboratory Fees, per semester:

Assaying.....	(to be arranged with Treasurer)	
Biology, each course requiring laboratory work.....		4.00
Chemistry .....		10.00
Electrical Engineering, any two unit course.....		8.00
Philosophy:		
Course 8, Psychology Laboratory.....		2.00
Physics:		
Any one unit course.....		4.00
Any two unit course.....		6.00
Surveying, field work.....	one unit, \$2.50; two units	4.00

Students in Chemistry deposit a breakage fee of \$7.00, which, after deducting the cost of goods broken, will be refunded at the close of the year.

Room and board (except luncheon Monday to Friday) in the Women's Halls, one hundred and ten dollars (\$110.00) per semester, payable in advance. A cash deposit of \$10.00 required for the reservation of a room (not refundable).

Ministers in the regular work of any evangelical denomination may have tuition for their children at half rates.

A discount of ten per cent of the tuition is allowed where two or more students enter from the same family.

A portion of the tuition may be refunded in case a student is compelled to cancel his registration on account of sickness. No refund will be made for an absence of less than half a semester.

Charges for **Graduate work** are made according to the above schedule, except that students who have received their Bachelor's degree from the University of Southern California are granted twenty-five per cent discount.

Ten per cent discount on Tuition of all public school teachers—in active work—who are taking more than two hours in the University.

The University reserves the right to change any of the rates or discounts printed in this year book, without notice.

### Living Expenses

The Hodge Hall Boarding Club furnishes board for young men at very reasonable rates. Information concerning membership in this club can be obtained upon application.

Board and furnished rooms can be secured in private families at from five to seven dollars per week. Furnished rooms, accommodating two students, cost from eight to twelve dollars per month.

Other expenses incident to college life vary with the habits and circumstances of the student. They are not of necessity so great as to be burdensome to persons in moderate circumstances.

The Young Men's Christian Association conducts a free rental bureau for the benefit of all students and has all available rooms in the vicinity of the University campus listed and on file. The Young Men's Christian Association and the Young Women's Christian Association also conduct an employment bureau for the purpose of aiding needy and worthy students who are desirous of earning a part of their expenses while in college. The president of these Associations will be glad to answer any requests for information addressed to them.

A number of students each year find it possible to earn enough while attending the University to pay their expenses for the year. However, the University recommends that a student provide himself with resources sufficient for the expenses of one semester before registering for full work.

## SCHOLARSHIPS

The following scholarships have been founded in the College of Liberal Arts. Others contemplate the establishment of prizes and scholarships, and it is earnestly hoped that soon a considerably larger number can be offered. Friends of the University can greatly add to its attractiveness in this way.

**The Hugh Johnston Scholarship** was founded by Mrs. Anna H. Johnston, of Pasadena, in memory of her deceased husband, and is for the benefit of needy students. Mrs. Johnston will name the incumbent when she desires; otherwise this will be done by the authorities of the University.

**The Spence Scholarship** was founded by the Hon. E. F. Spence in his life time, and is devoted to the use of needy students in the San Diego district, upon the recommendation of the District Superintendent of that district.

**The A. M. Peck Scholarship** was founded by A. M. Peck, of Compton.

**The Ontario Scholarship** is for the benefit of the Ontario High School.

**The Zana E. Stevens Scholarship** was founded by the Rev. F. G. H. Stevens, September 16th, 1907, in memory of Zana E. Stevens, née Terpenning, of the class of 1901. This scholarship is to be filled by a member of the J. O. C. class of the First Methodist Episcopal Church of Santa Monica, of which Mrs. Stevens was the organizer and teacher. The incumbent is to be named by the founder when he so desires, otherwise by the District Superintendent of the Los Angeles district and the authorities of the University. In case no member of this J. O. C. class is eligible, the incumbent shall be chosen from any J. O. C. members who apply for same. In case none such apply, the incumbent shall be chosen from any female students who apply.

**The A. M. Hough Scholarship** was founded by Mrs. Anna G. Hough, May 7th, 1908, by the payment of one thousand dollars. This scholarship is to be perpetual, and is to be used to aid some student each year in the College of Liberal Arts who is preparing to enter the ministry of the Methodist Episcopal Church. In case no such student should apply, the President of the University is authorized to use the scholarship to benefit any worthy student needing such help.

**The George I. Cochran Scholarship** was founded by George I. Cochran, who names the student receiving the benefit.

**The Abbie Mills Scholarship** was founded by Miss Abbie Mills by the payment of \$1000. The scholarship is perpetual, the President to name the student receiving the benefit.

**The Marion McKinley Bovard Scholarship** was founded by Mrs. Anna Gould Hough as a memorial to the first President of the University. The sum of one thousand dollars paid makes the scholarship perpetual. The beneficiary must be selected from eligible relatives of the first President if any such candidates apply; otherwise the President of the University may award the scholarship to any worthy student.

**The Helen Miller Gould Scholarship** was founded by Miss Helen Miller Gould by the payment of one thousand dollars. Children of missionaries are eligible for the use of this scholarship.

**The Isaac Sunderland Scholarship** was founded by Mrs. Kate Sunderland, September, 1912, by the payment of one



thousand dollars. Mrs. Sunderland, or some person designated by her, selects the student to receive the benefit of the scholarship.

**The Fred W. Kelly Olympic Scholarship** was founded by the friends of Mr. Kelly under the leadership of "The Los Angeles Times" in recognition of the athletic victory won by Mr. Kelly at Stockholm, Sweden, July, 1912. He represented the University of Southern California at the International Olympic contests and won the first place in the one hundred and ten meter high-hurdle race, time, 15.1 seconds. The scholarship is perpetual.

**The S. P. and Helen B. Mulford Scholarship** was founded by Mr. and Mrs. Mulford, August 26, 1914 (their twenty-ninth wedding anniversary), by the payment of one thousand dollars as a thank offering to their Heavenly Father. The beneficiary may be named by the founders, or either of them. In case this right is not exercised the president of the University may name the beneficiary.

**The Zeta Tau Alpha Scholarship** was founded by the local chapter of the Zeta Tau Alpha Sorority in February, 1917. The beneficiary may or may not be a member of the sorority founding this scholarship. Any woman student in the College of Liberal Arts is eligible. Application for the use of this scholarship should be made to the President of the University, who, in consultation with the Zeta Tau Alpha Sorority, will make the selection.

**The Rhodes Scholarship.** Attention is called to the opportunities presented by the scholarships founded by the late Cecil Rhodes, of South Africa. Each of these is worth \$1500 per year for three years, the term to be spent at Oxford University. To be eligible to appointment candidates must pass a qualifying examination. Full particulars will be given on application to the Rhodes Scholarship Committee of the Faculty of Liberal Arts.

**The John Thompson Memorial Scholarship** was founded by the Baraca Class of the First M. E. Church of South Pasadena in memory of John Thompson, a former member of the class. It consists of one year's tuition in the College of Liberal Arts, the incumbent to be the man in the Senior Class of the South Pasadena High School who has made the highest record for scholarship for four years. The teacher of this class is Mr. Charles E. Carver, a graduate of the University.



## PRIZES

**The Lottie Lane Prize**, established by Mrs. Charlotte A. Thompson as a memorial to a deceased daughter, is an elaborate gold medal to be presented each year at Commencement to that member of the graduating class who shall have maintained the highest general average in scholarship throughout the whole college course. Students who have taken more than four academic years to complete the course, and those who have received credit for work done elsewhere than in this College, are not eligible for this prize. This medal was awarded in 1915 to Lucy Burwell Adams.

**The University Oratorical Prize** of a one-semester scholarship in the junior or senior year of the College of Liberal Arts (value, forty dollars) is offered to that student who represents the University in the annual Intercollegiate Oratorical Contest; and an additional one-semester scholarship in the junior or senior year is awarded if the said representative wins first place in the Intercollegiate Contest. The scholarship is not transferable.

**The Intercollegiate Prohibition Oratorical Contest Prize** of one semester in the junior or senior year of the College of Liberal Arts (value, forty-five dollars) is offered to that student who represents the University in the annual Intercollegiate Prohibition Oratorical Contest; and an additional one-semester scholarship in the junior or senior year is awarded if the said representative wins first place in the Intercollegiate Prohibition Contest. The scholarship is not transferable.

## GIFTS TO THE UNIVERSITY

**The Hough Fund.** This is a fund of \$85,000 given by Rev. Asahel M. Hough, deceased, and his wife, Anna G. Hough, of Los Angeles. It is to be held by the University in perpetuity, and the income is to be used for current expenses of the College of Liberal Arts, or as the Board of Trustees may annually direct.

**The Hazzard Professorship.** Rev. A. C. Hazzard has given to the University property valued at \$30,000 for the endowment of a professorship in the English Bible.

**The Merryman Professorship.** Mr. T. D. Merryman has given to the University property valued at \$25,000 for the endowment of a professorship in Mathematics.

**The Hartupee Gift.** This gift consists of \$22,500.

**The Carnegie Gift.** This gift consists of \$25,000.

For further information address

UNIVERSITY OF SOUTHERN CALIFORNIA,  
Los Angeles, California.

# SUMMER SESSION

## Announcement

The twelfth annual Summer Session of the College of Liberal Arts of the University of Southern California will be held at the College of Liberal Arts on University Avenue, and at the Venice Marine Station, from July 2 to August 11, 1917.

Thursday, Friday and Saturday, June 28, 29, and 30, will be regular registration days at the Registrar's office, and when practicable, students are asked to register on these days.

## Visiting Professors

Following the custom of other years, the University has secured the services of a number of eminent educators who will assist the members of the regular faculty in the instruction of the Summer Session.

**Dr. Ernest Carroll Moore** of Harvard University, who returns for the third year to give courses in Educational Methodology and School Administration.

**Dr. Grace M. Fernald**, who will repeat the course in the study of exceptional children given last year.

**Miss Carolyn Alchin**, of Los Angeles, author of "Applied Harmony." Harmony. Tone Thinking and Ear Training.

**Dr. Raymond MacDonald Alden**, Professor of English at Leland Stanford Junior University. Tragedy and the Literature of the Revolutionary and Romantic Movements, 1790-1825.

**Dr. Richard Gause Boone**, Professor of Education the University of California. Growth of Educational Doctrine. The Pathology and Training of Adolescents.

**Dr. Thomas Nixon Carver**, Professor of Political Economy at Harvard University and formerly Adviser to the Federal Government in Agricultural Economics. The Theory of Social Progress and Rural Economics.

**Dr. Charles Edward Chapman**, Assistant Professor of California History at the University of California. Southwestern and Latin American History.

**Dr. Leon Dupriez**, Professor of Law at the University of Louvain, Belgium, and Special Lecturer at Harvard University. International Law. Education.

**Miss Mae I. Knight**, of the Long Beach Junior College. History and Appreciation of Music.

**Dr. Edward Benjamin Krehbiel**, Professor of History at Leland Stanford Junior University. International Policy. Modern International Affairs. (Under the Carnegie Foundation.)

**Dr. Ralph Smith Minor**, Associate Professor of Physics at the University of California. College Physics.

**Mr. Perham W. Nahl**, Instructor in Freehand Drawing and Art Anatomy at the University of California. Freehand Drawing and Perspective. Figure Drawing and Composition.

**Miss Alice Rogers**, Supervisor of Music in the Long Beach Public Schools. Methods of Teaching Music in the Grade and High Schools.

**Dr. Franz Schneider**, Instructor in German at the University of California. College German.

**Dr. William H. Snyder**, Principal of the Hollywood Junior College. General Science.

### **Purpose of the Summer School**

Courses offered in the Summer Session are designed to meet the needs of the following classes:

1. Undergraduates and graduates of schools and colleges.
2. Teachers, including those in grade schools, high schools, and other institutions of learning.
3. Persons desiring (as auditors) to attend courses without doing full or regular work, or taking examinations. Those enrolled as auditors do not receive University credits.

### **Co-operation with the State University**

In the list of visiting professors there will be found the names of several men from the University of California. This is one phase of the co-operation which the State University is extending to the Summer Session of the University of Southern California.

### Admission Requirements

The admission requirements to the Summer Session are, for all except those enrolled as auditors, uniform with the admission requirements to the regular sessions of the College of Liberal Arts.

### Credits

Six units of College credit represent full work for the Summer Session. In case an undergraduate student carries successfully more than a full course, before additional credit may be obtained application must be made to the Registrar, and such application must be favorably acted upon by the Scholarship Committee. By a recent ruling of the Graduate Council six units is, as a rule, the maximum credit for a graduate student in a single Summer Session.

All classes recite five times a week unless otherwise indicated. Five recitations or ten laboratory hours per week for the six weeks entitle the student to two units of credit.

### FEES AND EXPENSES

The payment of the Registration Fee entitles a student to enroll in as many of the courses as he is qualified to carry.

Registration fee .....	\$20.00
------------------------	---------

Laboratory fees—

Chemistry .....	8.00
-----------------	------

(A breakage deposit of \$3.00 is also required. This is returned, less breakage.)

Botany .....	3.00
--------------	------

Zoology .....	3.00
---------------	------

Physics .....	3.00
---------------	------

The University reserves the right to change any of the rates or discounts printed in this year book, without notice.

### Summer Session Announcement

The Announcement of the Summer Session is now ready for distribution. It contains full information concerning the work offered and may be obtained by application to the Registrar,



# THE COLLEGE OF PHYSICIANS AND SURGEONS

## FOREWORD

The University of Southern California, in establishing and building up the various professional colleges, was one of the first institutions in the West to broaden the scope of the curriculum in its medical department. In 1885, when the medical department of this University was founded, the Trustees placed themselves on record for higher medical education, declaring for a three-year course, which was the exception at that time, and since then this institution has constantly striven to place its medical department upon a high plane of efficiency, raising its entrance requirements to one year of college work, in addition to the high school course, beginning with session of 1914-15, and to two years of college work beginning with session of 1916-17. The Alumni of the Medical Department of this University include many of the leading physicians and surgeons of this country.

The College of Physicians and Surgeons of Los Angeles, became an integral part of the University of Southern California August 11, 1909.

The government of the College of Physicians and Surgeons is vested in the Board of Trustees of the University, as provided in the articles of incorporation.

## Environment

The advantages derived by the students of the University of Southern California from the fact that it is situated in Los Angeles, the metropolis of Southern California, have already been noted.

The population of Los Angeles is essentially cosmopolitan. People in the different walks of life, from all quarters of the globe, are to be found here, and there is therefore an abundance of clinical material, which this college utilizes to the very best advantage.

## FACILITIES FOR INSTRUCTION

### The College Building

Located at 516 East Washington Street, in a charming section of Los Angeles, surrounded by splendid homes and easy of access, not on the outskirts of the city nor yet too

near the business center, is to be found the modern and commodious building of the College of Physicians and Surgeons. It was designed and erected especially for our use, and contains all of the elements of a modern and thoroughly up-to-date college hall. It is a three-story structure with basement, is built of brick with stone facings, and is practically fireproof.

In the basement are located the instantaneous water-heating system; a furnace that conveys heated air to each department, with apparatus for forcing cool and pure air into each room when needed; storage tanks for anatomical material; a receiving and preparation room for the same; and a shower bath for the use of students.

On the first floor are located the college offices, the library and reading room; a chemical laboratory; a laboratory for physiology and pharmacology, thoroughly equipped with all modern apparatus and appliances; clinical rooms for each department of medicine and surgery, and specialties; the operating room, sterilizing room, clinic waiting room, and drug room; and a completely equipped clinical laboratory for the use of the clinic department.

Located on the second floor are the Pathological, Bacteriological, Histological, and Embryological laboratories, which have east, north and west exposures, affording an abundance of light, and are well heated and equipped with all modern appliances. Glass-covered tables are arranged around the north and west exposures, and all the latest apparatus has been installed. Each student is supplied with a microscope (Bausch and Lomb), with oil-immersion lens, for use when required. Private laboratories form a part of the main laboratory hall, thus affording opportunity for special private research. On the second floor are also located one large amphitheatre, seated with two hundred modern opera chairs; also equipped with one of the latest projectoscopes; one lecture hall, seated with opera chairs; an electrotherapeutic room, equipped with coils, X-ray apparatus, and all necessary appliances; and a chart room, supplied with imported charts, manikins, etc., arranged for use in various illustrative and didactic work. There are to be found upon the shelves of the College Museum many rare and valuable pathological specimens. A room on the second floor has been set apart and furnished for the exclusive use of women students.

On the third floor is located the Anatomical Department, complete in every detail. Opening into the main Anatomical Department, by sliding doors, is the Anatomical Amphitheatre, seated with opera chairs and equipped with a revolving table, so arranged that the most delicate operations and demonstrations upon the cadaver can be witnessed.

Much new apparatus is constantly being added in all departments, stereopticon illustration being one of the leading features in our primary departments. No expense has been spared to equip this college adequately for the teaching of medicine and surgery and for the comfort and health of teachers and students.

### **Laboratory Equipment**

**Division I. Anatomy, Histology and Embryology. (a)**  
**The Anatomical Laboratory** is admirably adapted for the purpose of teaching practical anatomy. The room is on the top floor of the college building and is well lighted, well ventilated, and is kept in a thoroughly sanitary condition. It is provided with every facility for giving students a detailed knowledge of anatomical structures. A notable feature of the dissecting room is the excellent light from the roof through extensive skylights, and when sunlight fails, electricity is employed with equally good effect. In addition to abundant material for dissection, the Anatomical Laboratory contains a large and very valuable collection of dissected parts, which have been especially prepared for their teaching value and not as a mere collection of rare specimens. They are displayed so that the student can acquaint himself with their anatomical importance. The lecture and demonstration amphitheatre is adjoining the dissecting laboratory, with folding doors leading into the lecture hall, thus offering additional facilities for presenting the dissected specimens to the classes during lecture and demonstration. On the same floor a thoroughly equipped bone library is situated, which consists of articulated and numerous disarticulated human bones, perfectly bleached. From this bone library, lateral halves of the human skeleton, arranged in neat wooden boxes, specially provided for that purpose, are loaned to the student, free of charge, to facilitate his study at home.

Across the hall from the bone library, special private laboratories are provided for the professor and his assistants, for research work in General anatomy, including Histology, Embryology and Neural Anatomy.

The laboratory is equipped with the most modern scientific appliances, such as dissecting microscopes, a compound microscope of the very best foreign make, a precision microtome, a rotary microtome for serial sections and a number of other indispensable instruments. In connection with this laboratory a chart and model room is maintained. This consists of many imported papier mache models of organs of the special senses, particularly brain and spinal cord, also about one hundred brush and paint anatomical charts 20x45 inches, made from actual dissections and painted by one of the best anatomical artists of the East.

A recent addition to the equipment of the Anatomical Department is a delineascope, thus affording additional facilities to illustrate an almost unlimited amount of available material and thereby provide thorough, practical and efficient application of the subject under discussion.

(b) In addition to the complete and thoroughly equipped Anatomical Department, the Histological and Embryological Departments, which are a part of the Anatomical Section, are thoroughly equipped with all modern and up-to-date apparatus necessary for the teaching and conducting of these most important correlative branches. This department is abundantly supplied with high-grade microscopes, with Abbe condenser, diaphragm attachments and oil immersion lens, paraffin baths, the latest modern microtomes for celloidin and paraffin sections, projectoscopes, injection apparatus, charts, drawings and a vast collection of slides of tissue and organs, together with absolutely all necessary apparatus for bringing these two important departments up to the very highest state of efficiency.

**Division II. Chemistry, Toxicology and Dietetics.** The **Chemical Laboratory** is well equipped with the apparatus necessary for efficient instruction. Fume chambers and ventilating hoods provide adequate means for removal of obnoxious gases. Among the special pieces of apparatus may be found a modern spectroscope, polariscope, equipment for the determination of freezing-points, Duboscq and Autenreit colorimeters, centrifuge, and autoclave. The more general supplies, such as analytical balances, drying ovens, Kjeldahl nitrogen apparatus, glassware, iron stands, burners, etc., are adequately provided, each student being supplied individually with the smaller pieces in his own locker.



**Division III. Physiology and Pharmacology.** These departments are especially well equipped for the work necessary in these most important subjects. Much apparatus is needed and is at hand. It would be impossible to enumerate specifically the equipment, but suffice it to say that in the Physiological Department all necessary apparatus for blood work is at hand, spectroscopes, compound microscopes, kymographs, sphygmographs, respirometers, chronograph and stimulating apparatus, coils, batteries, cylinders and rheocords, moist chambers and all accessories for nerve work; heart levers, manometers, tonometers, etc., with accessories and all necessary apparatus for the study of capillary circulation; polariscopes, galvanometers and mercury cups for gas analytical work, thermostats and incubators, ophthalmometers, and ophthalmoscope, lenses.

**Division IV. Pathology, Bacteriology and Clinical Microscopy.** (a) **The Pathological Laboratory** is furnished with paraffin bath and the necessary accessories for the proper embedding of tissues, a microtome for cutting colloidin sections, and one for cutting paraffin sections, a freezing microtome, a projectoscope and charts, as well as a collection of microscopical specimens of all the ordinary pathological lesions and many of the rare conditions, which are given to the student for study.

Each student is supplied with a microscope furnished with the necessary objectives, oculars, Abbe condenser, diaphragm, etc.

In addition to this, each student is supplied with a complete set of mounting and staining materials suitable for doing first class work in the preparation of his own specimens. In order to enable the student to do efficient work, the classes are divided into sections when necessary, so as to afford ample room and opportunity for each one to work independently of the other.

Each student must supply himself with a suitable drawing outfit and must draw the essential features of the various lesions as represented by the slides which are furnished by the department.

The Museum, which is located on the second floor of the college building, is equipped with a large supply of specimen jars, and the gross specimens, which already include most of the pathological tissues number between one and two thousand. These specimens are catalogued by card in-



dex systems, which enables the department to keep data of each specimen. The specimens are given to the students repeatedly during the course of the year to enable them to become familiar with the naked-eye appearance of gross pathological lesions.

(b) In the **Bacteriological Department**, the equipment is ample to permit two students to work in pairs independent of the remainder of the class, in the preparation of culture media, staining fluids, etc., while for the sterilization of glassware and of the finished media, one hot air oven is supplied to each group of five students, and one autoclave and one Koch's serum oven for each group of twenty-five students.

Each group of two students is supplied with boilers, burettes for accurate trituration and adjustment of the reaction of the media, glass funnels with filter paper and cheesecloth, test paper, cork borers, scales, and materials for making the ordinary culture media, as bouillon, gelatin, agar, milk, potatoes and blood serum.

Each student is individually supplied with an ample number of culture tubes, Petri dishes, flasks, cleaning brushes, fermentation tubes, platinum wires, plain and hollow ground slides, staining fluids and mounting materials.

The department has an ice chest for preserving media and certain cultures, an incubator, electric centrifuge, Novi jars for anaerobic bacteria, animal holders to facilitate inoculation, etc.

In the preparation of culture media the students work in the laboratory on the first floor, where at present our facilities in the way of gas, water, and desk room are greater than in the laboratory on the second floor; the latter laboratory is well lighted and has ample desk room and seating capacity, and is used by the students in class work, viz., in inoculation of media, study of biological characteristics and microscopical appearances, each student being provided with a microscope. This room is also supplied with lockers, in which the student keeps such cultures as do not require the incubator. The incubator is also located in this room, to which the student can have access as often as is necessary to enable him to note the rate of growth and other characteristics of the cultures.

### **The Teaching Staff**

The Faculty and the general teaching staff of the College of Physicians and Surgeons have been selected with scrupu-

lous care, and comprise many of the ablest teachers and leading men and women in the West. Laboratory facilities and equipment alone are not sufficient for a thorough course. Laboratories must be manned by competent and experienced teachers and instructors, and in this College the laboratories are in charge of full paid teachers, noted for their abilities as teachers in their respective departments.

## CLINICAL FACILITIES

### COUNTY HOSPITAL CLINIC

The Los Angeles County Hospital, the most extensive, modern and up-to-date county charity institution in the West, with fifteen hundred beds, detention wards for the insane, modern medical, surgical and contagious wards and departments, where all manner of surgical and medical cases may be studied and observed, offers rare and ample opportunities for the study of not only the ordinary diseases and conditions usually met with in other large hospitals, but also rare tropical and semi-tropical diseases that drift into Los Angeles through our seaport, the gateway of entrance from Panama, Hawaii, the Philippines, etc., the study of the diseases indigenous to which is most necessary at this time. Many interesting cases are met with daily, which afford unusual opportunities for research, and it is the policy of the clinical and laboratory staffs in this college to foster and assist students along these lines of work. The advantages to the student here consist not merely in his walking through the wards, observing patients, with an occasional opportunity to examine, but the Senior and Junior classes are divided into sections and these sections of two and three students are allotted cases each week and are required to examine and diagnose by the latest and best known laboratory and clinical tests, write histories covering the etiological factors of each disease and outline the treatment and management of given cases throughout the different stages. This does not, however, end the student's interest in the case, which must be followed to convalescence or to autopsy, in which event, the pathological findings are recorded and reported upon by the section in charge of the case, the efficiency, or otherwise, of work thus done being noted.

The opportunities for the study and observation of acute Surgery are abundant, many cases being sent in from the City Hospital after first aid is given, and hundreds of cases being taken direct to the hospital for first aid and subsequent

treatment. The Ambulatory Surgical clinic is unexcelled, and the Detention Wards afford a rich field for the study of the various forms of neurotic cases and conditions. Students in this college are required to serve their time in each and all of the various departments of this hospital, which offer so rich a field for clinical experience.

#### WASHINGTON STREET CLINIC (College Dispensary)

From 1 to 3 p. m. each day, excepting Sundays and holidays, the College Dispensary is open to the needy poor. The Dispensary staff of the college, composed of over twenty carefully selected professional men and women, give their very best services to those applying for treatment, and, as the College of Physicians and Surgeons is located in a decidedly well-to-do neighborhood, therefore the clinics in this institution are of a decidedly high order, capable of giving a complete case history, which enables the teacher and student to carefully study each case in detail and note from time to time the effect of therapeutic measures. Material coming to this clinic is ample and of splendid quality. More than fifty patients apply daily for treatment in the various departments of this clinic, and the number is steadily increasing.

A registered pharmacist is in charge of the prescription department and students are rotated in sections through this department and have practical experience under the direct instruction of the pharmacist in charge. Prescriptions are compounded as the attending physician orders, no stock formulas being permitted.

#### OUT-PATIENT CLINIC

The Out-Patient Clinic available is extensive. The population of the city of Los Angeles has a large foreign and floating element, which contribute largely to our clinics in all departments. Our clinics draw materially, though not wholly by any means, from this available material and our Out-Patient Clinic, Obstetrical and General, is made abundant by conditions always existing in a city of over a half million population. The clinics maintain a well regulated system of assigning students from the upper classes to this out-patient service, of which complete record is kept and control maintained, the Obstetrical service being especially abundant.

**MATERNITY DISPENSARY**

The central headquarters for obstetrical clinics are known as the Maternity Dispensary and are located at 1320 Wilson Street, in the heart of the most thickly populated district of Los Angeles. During the senior year students are assigned in rotation to the Dispensary, where they remain in residence for two weeks. While in residence students are provided with comfortable living and sleeping quarters. Obstetrical material is abundant, and during his service each student conducts at least twelve labors, under rigid supervision, and witnesses from twenty to fifty labors in all the clinics of the Dispensary, County Hospital and allied institutions.

**NINTH STREET DISPENSARY**

(Obstetrical Clinic)

**The Ninth Street Dispensary**, located at the Neighborhood House Settlement, 2150 East Ninth Street, is open on Friday mornings from 9 to 12 o'clock. At this clinic the student personally examines each patient and is given accurate instruction in obstetrical care and examinations before and after delivery.

**JACKSON STREET DISPENSARY**

(Obstetrical Clinic)

**The Jackson Street Dispensary**, located at the Brownson House Settlement, 711 Jackson Street, is open on Tuesday mornings from 9 to 12 o'clock. At this clinic the student personally examines each patient and is given accurate instruction in obstetrical care and examination before and after delivery.

The three dispensaries above mentioned handle annually about 1500 obstetrical patients. Special attention is given to accurate obstetrical history writing, the student's findings being recorded on the standard obstetrical history sheets especially prepared for this department.

**LIBRARY FACILITIES**

The College Library and Reading Room is located on the first floor and occupies a spacious, well lighted, heated and ventilated room, with east and north frontage, furnished with three large library tables, around which students gather,



and with comfortable arm reading chairs placed around the room in sufficient numbers to accommodate as many students as desire to avail themselves of this splendid advantage. About two thousand medical volumes, many of them the latest modern text and reference books, are on the library shelves, and over eighty up-to-date (and many of them the leading) medical periodicals come regularly to our library table. The library is under the control of a librarian and the Dewey library system of receiving, marking, listing and distributing is maintained.

The College of Physicians and Surgeons being an integral part of the University of Southern California, our students have free access to the University library, containing over eighteen thousand volumes, covering the entire range of literary and scientific subjects. The Barlow Medical Library, containing about four thousand volumes, donated to the medical profession of Southern California, is available to the students of this college. The Los Angeles County Hospital also has a good medical library, to which our students have access.

A very important feature of our library facilities is the large number of current medical journals from throughout the country coming regularly to our library tables, which enables the upper class students to keep in touch with current medical topics. The women members of the various classes have their separate reading room, splendidly furnished and equipped.

## **REQUIREMENTS FOR MATRICULATION, ADVANCED STANDING AND GRADUATION**

### **Requirements for Freshman Matriculation Session of 1916-17**

In accordance with the general advance in medical and surgical teaching and the necessary pre-medical training, the following requirements for entrance to the Freshman class have been established. Beginning with the 1916-17 session this College matriculates Freshman students only on the following standard:

A certificate from the Credential Committee of the University of Southern California, covering Requirements I and II, as mentioned below: (Applicants for matriculation are



requested to present their credentials to the Registrar of the University, Prof. J. H. Montgomery, Thirty-fifth Street and University Avenue, Los Angeles. After securing entrance certificate, applicants are requested to matriculate at the Dean's office, 810 Citizens' National Bank Building, as early as possible. No student will be matriculated after September 14th.)

### Requirement No. I

A diploma and transcript of record from a fully accredited high school,<sup>1</sup> normal school, or academy, requiring for admission evidence of the completion of a standard course in primary and intermediate grades, and for graduation the completion of a standard high school course embracing the fourteen units mentioned below; or an examination<sup>2</sup> in the following branches, totaling fourteen units,<sup>3</sup> to be made up of seven required and seven elective units as prescribed in the following table:

	Required Units	Elective Units	Total Units
<b>ENGLISH—</b>			
Reading and Practice.....	2	....	2
Study and Practice.....	....	1	1
<b>MATHEMATICS—</b>			
Algebra to Quadratics .....	1	....	1
Algebra (quadratic equations, the binomial theorem and the progressions) .....	....	$\frac{1}{2}$	$\frac{1}{2}$
Plane Geometry .....	1	....	1
Solid Geometry .....	....	$\frac{1}{2}$	$\frac{1}{2}$
Trigonometry .....	....	$\frac{1}{2}$	$\frac{1}{2}$

<sup>1</sup>The term "accredited" as applied to high schools, academies, colleges, and universities means institutions of those types that have been investigated and are accredited by the State University of their respective states, or by the North Central Association of Colleges and Secondary Schools, the Association of College and Preparatory Schools of the Middle States and Maryland, the New England College Entrance Certificate Board, or the Association of American Universities.

<sup>2</sup>This examination must be conducted by and under the authority of the Board of Medical Examiners of the state in which the college is located, or by a duly authorized examiner of the College Entrance Examination Board, or by the authorized examiner of an accredited university, state or otherwise, or by an examiner whose certificates are accepted by accredited colleges or universities, or by a method approved by the Judicial Council of the Association of American Medical Colleges. The Credential Committee of the University of Southern California was appointed by the Board of Medical Examiners of the State of California to pass upon and evaluate preliminary credentials of medical students in the southern part of this state.

<sup>3</sup>A unit is the credit value of at least 36 weeks' work of 4 or 5 recitation periods per week, each recitation period to be of not less than 40 minutes. In other words, a unit represents a year's study in any subject in a secondary school constituting approximately a quarter of a full year's work. A satisfactory year's work in any subject cannot be accomplished under ordinary circumstances in less than 120 sixty-minute hours, or their equivalent.

**LATIN—**

Grammar and Composition.....	1	1
Caesar .....	1	1
Cicero .....	1	1
Virgil .....	1	1
Cornelius Nepos .....	1	1

**Greek—**

Grammar and Composition.....	1	1
Xenophon .....	1	1
Homer .....	1	1

**GERMAN OR FRENCH<sup>4</sup>—**

Elementary .....	2	2
Intermediate .....	1	1

**Spanish—**

Elementary .....	2	2
------------------	---	---

**Scandinavian—**

Elementary .....	2	2
------------------	---	---

**HISTORY—**

American History and Civil Government .....	1	1
Greek and Roman History.....	1	1
Medieval and Modern History.....	1	1
English History .....	1	1

**Science<sup>5</sup>—**

Biology .....	1	1
(Or Botany and Zoology, each).....	1	1
Chemistry .....	1	1
Physics .....	1	1
Physiography .....	$\frac{1}{2}$	$\frac{1}{2}$
Physiology .....	$\frac{1}{2}$	$\frac{1}{2}$

Agriculture .....	1	1
Drawing .....	1	1
Manual Training .....	1	1
Domestic Science .....	1	1
Music (Appreciation or Harmony).....	1	1
Total .....	7	28 $\frac{1}{2}$
		35 $\frac{1}{2}$

**Requirement No. II.**

In addition to the above prescribed college preparatory units, **two full years'** work in the College of Liberal Arts of the University of Southern California, or other approved college or university, as indicated in the following schedule:

<sup>4</sup>Two units of Greek or Latin may be substituted for the two required units of French or German. But this will necessitate extra work in French or German in the college year. See note 7.

<sup>5</sup>It will be greatly to the student's advantage to include Biology, Chemistry, and Physics among his elective units. See note 7. Credentials of each science course must include evidence of laboratory work.

	Lectures or Recitations per week	Laboratory <sup>s</sup> Periods per week	Total Hours per Semester	Total Hours per year Semester
Physics <sup>9</sup> .....	2	2	4	8
Chemistry .....	2	2	4	8
Biology .....	2 or 3	2 or 1	4	8
German or French.....	4 or 3		4 or 3	8 or 6
English .....	3		3	6
Psychology .....	3		3	6
Totals .....	16	6 or 5	22 or 21	44 or 42

The foregoing table may be expressed in class hours as follows:

	Total Hrs. Lectures or Recitations	Total Hours Laboratory Work	Total Minimum Hr. Didactic and Laboratory
Physics <sup>9</sup> .....	64	128	192
Chemistry .....	64	128	192
Biology .....	64 or 96	128 or 64	192 or 160
German or French.....	128 or 96		128 or 96
English .....	96		96
Psychology .....	96		96
Totals .....	512	384 or 320	896 or 832

Additional elective units to complete course of 60 units—

### Advanced Standing

This College does not grant time-credit to students holding a baccalaureate degree or a degree in Pharmacy or Dentistry, or for time spent in any other than a regular College of Medicine and Surgery, the curriculum and course of which meet the requirements of the Association of American Medical Colleges.

A student who has previously matriculated with and has spent time in another accredited medical college, recognized as such by this institution, will be required to present to the Dean of this College a statement from the Dean of the college

<sup>7</sup>The statement of units and of hours of recitations as given in the lists presupposes that in each case one unit of preparatory work in that subject (two units in the case of German and French) has been offered for entrance to the college course in question. If in the case of any subject except Physics (see note 9) this preparatory work has not been done, the deficiency must be made up in full during the course of the college year prior to matriculation in the College of Physicians and Surgeons.

<sup>8</sup>Each laboratory period must extend over at least two hours.

<sup>9</sup>For the one-year Physics requirement, may be substituted one unit of high school Physics and a half-year of college Physics, which continues, and does not duplicate, the work done in high school.

he has attended, stating that he has paid all dues and fees due said college; that he is free from all charges or demerits of whatever nature; and that he has satisfactorily completed the course of study prescribed by the curriculum of said colleges; and provided that the entrance requirements of the college from which he presents his credentials were equivalent to those of the Association of American Medical Colleges at that time, and that the course of study provided and set forth in each student year was equivalent to the requirements of this school; and provided further that the Judicial Council are satisfied with his credits and markings, taking into consideration his general average, which will include his percentage of attendance upon all lectures, recitations, laboratory work, and clinics, the student may then enter upon his work in the succeeding grade. Before advanced standing will be granted him, however, the Dean of this College will verify the student's credentials. If they are found complete and satisfactory, credit for the work will be entered upon the records of this college; but such advancement will not exempt the student from the final examination requirements exacted of all students applying for a degree from this College.

A student presenting credentials and credits from another medical college, recognized by this College, should bear in mind the fact that such credentials must show that the credits were received in the regular way, and in the regular course of instruction; and that the said course must have been regular and in accordance with the requirements of the Association of American Medical Colleges, the California State Law, and the Board of Medical Examiners of the State of California. No credit whatever will be allowed for time not actually spent in a regular recognized medical college.

A student who has attended one or more courses in a medical college otherwise reputable, but whose entrance requirements are not now equivalent to those of this institution, notwithstanding he may meet our class examination requirements, will not be granted advanced standing, unless the preliminary qualifications of said students were equivalent to the requirements of this college at the date of matriculation in the college from which he comes.

Graduates of medical colleges whose requirements were equivalent to those prescribed by the Association of American Medical Colleges, and whose credentials are recognized by the Board of Medical Examiners of the State of California, will be admitted to the Senior class without examination;



provided, however, that the curriculum of study of the aforesaid college covered three full years, and provided also that the requirements for matriculation were equivalent to the requirements of the Association of American Medical Colleges at the time of his matriculation. Should, however, the college from which the applicant graduated have prescribed and required at the time of his graduation only a two years' course, the applicant will be matriculated in the Junior year and will be required to pursue the course outlined in our Junior year schedule, provided that the matriculant is working for a degree from this school, but not otherwise. Juniors and Seniors of this College are required to attend at least 80 per cent of all clinics throughout the Junior and Senior years.

To graduates and students of Colleges of Homeopathic or Eclectic Medicine will be granted time-credits for as many years as they attended those colleges, provided they have met the previous requirements of the Association of American Medical Colleges, and that they pass an examination in Materia Medica and Therapeutics, as prescribed by this College. All students admitted to advanced standing must show credentials of having passed regular examinations in the branches taken in the year preceding the one they desire to enter, or must pass such examination in this College.

### **REGULATION GOVERNING THE COURSE OF STUDY**

The curriculum of study in this College is divided in a manner that enables the student to complete his minors, together with the majority of the laboratory courses, during the Freshman and Sophomore years, thus enabling the Junior and Senior students to avail themselves of the large amount of didactic, recitation, and clinical work that composes the last two years of the course.

Each student is required to attend 80 per cent of all exercises in every annual course of study for which he seeks credit. No student will be given credit on examination unless he shall have attained a grade of at least 75 per cent, or its equivalent in some other marking system, and no student will be graduated unless he shall have attained a passing grade on examination of at least 80 per cent in each and all subjects taught and examined upon in this college.

The carrying and removal of conditions in all cases will be governed by the rules and regulations promulgated from time to time by the Association of American Medical Col-



leges and in conformity with the State Law of California. When not in conflict with these rules and regulations a student, to advance from one grade to the next higher grade, must pass at least all but two of the required examinations in the branches or subjects taught in that year, except that in passing from the Junior to the Senior year, all of the required examinations must be passed. Should he fail, at the beginning of the succeeding session, to pass the examination in the subjects in which he has been conditioned as stated above, he may enter the higher class as a conditioned student for that one session only, and if he does not remove the said conditions by the end of the session, he must repeat the work of the year in which the said conditions were imposed.

No student can, therefore, become a conditioned or an unconditioned member of the Sophomore class unless he has passed at least all but two of the required Freshman year examinations when that year closes; nor of the Junior class unless he shall have passed the Freshman year examinations, and, in addition, at least all but two of the Sophomore year examinations at the close of that year; nor of the Senior class unless he shall have passed all of the Freshman, Sophomore and Junior year examinations. This College does not permit the carrying of conditions into the Senior year.

This College reserves the right to refuse admission to any student, or to terminate the attendance of any student, at any time, for what may appear to the Judicial Council to be good and sufficient cause, as inefficiency, conduct unbecoming a gentleman, or conduct not conducive to the morale of the class or institution; and also to refuse a student the privilege of any special or final examination, for cause, as above stated.

Students will not be permitted to substitute private work in any branch for the regular college work prescribed in our curriculum, except under the direct supervision of an instructor designated or appointed by the Dean. Examinations in work so done will be conducted by the professor to whose department it belongs. No markings nor credits from private instructors will be recognized.

A student entering this College will be required to conform to all rules and regulations of the College as promulgated from time to time by the Dean.

A student who is under suspension or expulsion from an accredited medical college will not be matriculated in this institution without the written consent of the college imposing such suspension or expulsion.

A student defacing or injuring the property of this College will be required to make due reparation for same.

## REQUIREMENTS FOR GRADUATION

The applicant for the degree of Doctor of Medicine must have fulfilled all the requirements as set forth in this announcement, and all other additional requirements that may be promulgated from time to time by this Collège. He must also be eligible for graduation under the following conditions:

1. He must have attained the age of twenty-one years and have a good moral character.

2. He must have notified the Dean on or before the first day of April of the college year, in writing, of his intention to apply for and to take the final examinations of this Collège; said application being accompanied by the examination fee of twenty-five dollars, all previous fees having been paid.

3. He must have previously met all the matriculation requirements of this Collège, and must have attended at least four full courses of lectures, recitations, laboratory work, and clinics, in an accredited medical college whose requirements are equal to those prescribed by this Collège, no two courses having been done in the same year, and the last course having been taken in this Collège. If the student has attended courses in another medical college recognized by this institution he must have satisfied the Judicial Council, through the Dean, regarding his standing and his proficiency in the branches completed, either by examination or otherwise, as the Judicial Council may elect.

4. He must have completed the required courses in all the departments of the Collège, and his percentage of attendance must have been at least 80 per cent in all departments, and his percentage of proficiency on examination must not have been less than 80 per cent in all the branches indicated in our curriculum.

5. He must be present at the time and place scheduled by the Dean for final examination. His absence from an examination in a given department will indicate failure in that department, and will be entered as such against the student.

6. He must undergo a written final examination (or both written and oral, if required) in all departments. Each paper must be written in English; and the penmanship, orthography, punctuation, and general style and characteristics of each paper will be considered.

7. He must be free from demerit marks, must have discharged all conditions in each and every department, and must be present at the Commencement Exercises, unless excused in writing by the Dean.

### **COMBINED SEVEN-YEAR COURSE FOR THE DEGREE OF A.B. AND M.D.**

Students who have matriculated in the College of Liberal Arts of the University, and who plan to study medicine, may so combine the four-year course for the A.B. degree with the four-year course for the M.D. degree as to take both degrees in seven years.

### **COMBINED COURSE FOR THE DEGREE OF A.M. AND M.D.**

Students holding the A.B. degree from recognized colleges and who enter the Freshman class of the College of Physicians and Surgeons, may matriculate in the Graduate Department of the College of Liberal Arts, thus becoming candidates for the A.M. degree. Registration in the Graduate School may be made at any time before the opening of the Junior year. The candidate pursues advanced study along some special line and submits a thesis embodying original research. The degree of Master of Arts is given to the candidate upon the completion of the requirements for the advanced degree.<sup>1</sup>

### **PLACES OF ASSOCIATION AND RECREATION**

The students of medicine in this College, as in other medical institutions throughout the country, come from various walks of life; and each naturally seeks for himself a continuation of those environments which have shaped his previous mode of living. This city affords opportunities for the gratification of all tastes. Churches of all creeds and denominations are found here. The Y. M. C. A. is strong and influential, and extends a cordial welcome to young men who seek the refining influences of this splendid association. The Y. W. C. A., working along the same lines, is ever ready and anxious to serve the young woman who may wish to have thrown about her a Christian influence and a friendship that does much to assist and to protect. There are also numerous clubs, social and political; lodges and societies of all kinds; high-class theaters and places of amusement; and, in fact, all things that serve at times to relieve the student's mind from the strain of college work.

---

<sup>1</sup>For specific statement of the conditions of the A.M. degree taken under this provision, see page 54.

## FEES AND EXPENSES

	Freshman Year	Sophomore Year	Junior Year	Senior Year
Matriculation Fee (paid but once, at time of matriculation) .....	\$ 5.00	.....	.....	.....
Registration Fee (required of each student on signing the registration roll. This does not apply to students in their matriculation year, the matriculation fee covering this charge) .....	.....	\$ 2.00	\$ 2.00	\$ 2.00
Tuition Fee (payable in advance) each year .....	200.00	200.00	200.00	200.00
Final Examination Fee.....	.....	.....	.....	25.00
Rental of Microscope, charged each year, for its use in the laboratories, to students not furnishing their own microscopes.....	5.00	5.00	.....	.....
Breakage Deposit is required of all students of first and second years, to cover breakage and damage to buildings and equipment. Unexpended balance will be refunded at the close of the year.....	10.00	10.00	.....	.....
	<u>\$220.00</u>	<u>\$217.00</u>	<u>\$202.00</u>	<u>\$227.00</u>
County Hospital Ticket (Junior and Senior years only. Payable at the County Hospital). This ticket entitles the holder to clinical privileges in the County Hospital and applies to all students in attendance there .....	.....	.....	5.00	5.00

These fees are payable in advance each year. If not paid within four weeks of the beginning of the course, the right



to attend lectures may be forfeited, and no student will be permitted to take an examination and receive credit therefor to apply on advanced standing, who is in arrears for fees.

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

### **Expense of Living in Los Angeles**

The student can live in Los Angeles as in other large cities, moderately or extravagantly, according to his means or his habits of life. Good room and board near the College may be had for \$25.00 per month.

### **PRIZES TO BE AWARDED, SESSION 1916-17**

The Faculty will give a prize to that number of the Freshman Class who obtains the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Sophomore Class who obtains the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Junior Class who obtained the highest general average in the final examinations upon the studies of that year.

The Faculty will give a prize to that member of the Senior Class who obtains the highest general average in the final examinations upon the studies of that year.

#### **Surgery Prize**

Professor James H. Seymour will give a prize to the member of the Senior Class who obtains the highest general average throughout the year in the department of Surgery. Attendance, class and clinic work, general deportment and efficiency will count in the awarding of this prize.

#### **Gynecology and Abdominal Surgery Prize**

Professor Charles W. Bryson will give a prize to the member of the Senior Class who obtains the highest general average throughout the year in the department of Gynecology and Abdominal Surgery. Attendance, class and clinic work, general deportment and efficiency will count in the awarding of this prize.



### **Hospital Positions**

Internships and appointments in hospitals throughout the city and in surrounding towns are available to graduates from this college; in fact, in the past we have been unable to fill the positions open to appointments.

### **HOW TO REACH THE COLLEGE**

Upon arrival in the city, go directly to the office of the Dean, Dr. Charles W. Bryson, 810 Citizens National Bank Bldg., Fifth and Spring Sts., make known your wishes, and present your credentials. You will receive the most courteous treatment, and full information will be given you on all subjects pertaining to the College, either by the Dean in person, or by the Registrar of the University. The Clerk of the College will be instructed to assist you in selecting suitable quarters, and each member of the Faculty, as well as many students of the school, will endeavor to make you feel at home. The term opens for registration on the 29th of August and instruction begins promptly on the 4th of September in all departments.

Address applications for catalogues and all other communications to the Dean.

DR. CHARLES W. BRYSON  
810 Citizens National Bank Building,  
Los Angeles.

## DEPARTMENTS OF INSTRUCTION

The order of the studies pursued in this College is determined by the so-called "concentration method." The school year is divided into semesters. During the first semester the student concentrates his attention upon a limited number of subjects; in the following semester, the center of interest is shifted for the time being and at a later date the earlier material is again taken up for further emphasis and development. Experience has shown this arrangement of the schedule to possess marked advantage in flexibility of adjustment and thoroughness in the results achieved.

### A GENERAL OUTLINE OF THE DEPARTMENTS OF INSTRUCTION

A recent reclassification of the various departments of the College has effected a more intimate correlation of the instruction in related subjects. Medicine is a practical science; and in building the foundation upon which must rest the superstructure of advanced medical knowledge, there should be a grouping of the departments that necessarily combine at each stage of the process in order to secure more solidarity in instruction and greater concentration of purpose. Therefore Anatomy, Histology, and Embryology are placed under one control, or in one department, as each deals with normal anatomical structure. Physiology and Pharmacology, Chemistry, Toxicology and Dietetics have been similarly grouped to facilitate the demonstration of the action, in different stages of administration, of drugs upon various animal organisms. Pathology, Bacteriology, Clinical Microscopy and Hygiene are grouped together for reasons quite apparent. Materia Medica and Therapeutics, including Pharmacognosy, form Department IV, although Applied Therapeutics is taught throughout in the Department of Medicine, where it rightfully belongs. The Department of Medicine includes the allied departments of General Medicine, including Clinical Medicine, Physical Diagnosis, Neurology, Psychiatry, Pediatrics, Jurisprudence, Ethics, and Economics, Dermatology and Syphilography, as these various subjects are essentially medical. Department VI embraces those departments essentially surgical, or into which surgery at one stage or another largely enters, as General Surgery (including Orthopedic Surgery, Fractures, and Dislocations),

# SUMMARY OF CURRICULUM

College of Physicians and Surgeons, Medical Department, University of Southern California, Los Angeles, California, Sessions 1916-1917

[illegible]



The student body is divided into several groups in all departments, thus bringing each individual member of the class not only into close personal touch with the subject under consideration, but also into close personal contact with his instructor. There is systematic didactic instruction in all departments, intermingled with such laboratory, clinical and recitation periods as may be necessary to give the student a broad and comprehensive view of each subject.

Division I.	Anatomy, Histology, and Embryology.
Division II.	Chemistry, Toxicology and Dietetics .
Division III.	Physiology, and Pharmacology.
Division IV.	Pathology, Bacteriology, Clinical Microscopy and Hygiene.
Division V.	Material Medica, Pharmacognosy, and Ther- apeutics.
Division VI.	Medicine and Medical Specialties.
Division VII.	Surgery and Surgical Specialties.
Division VIII.	Obstetrics, Gynecology and Abdominal Sur- gery.

HARRY OSCAR WHITE, M.D.  
Professor of Anatomy, Histology and Embryology  
CLARENCE HOLMES CRILEY, Ph.B., M.D.  
Associate Professor of Anatomy  
MILES GUTHIE VARIAN, M.D.  
Lecturer on Anatomy  
FRANK R. WEBB, M.D.  
Demonstrator of Anatomy

This department aims to present the subject of Human Anatomy in a thoroughly scientific and practical manner. The laboratory work is done under constant surveillance. The student is required to take frequent individual quizzes upon the cadaver; to demonstrate all parts dissected to a



competent demonstrator; and to attend class quizzes and an individual oral and written final examination. The lectures supplement the laboratory work dealing with such facts from embryology and comparative vertebrate anatomy as will give breadth to the student's view of the field. In connection with the laboratory work, lectures are delivered, reviewing the work that has been completed. The object of this is to call attention to the relations and significance of the parts that have been studied and to elucidate, with the aid of specially prepared anatomical charts, diagrams, and imported models, the anatomy of difficult and important structures. Especial plans are taken to emphasize the broader morphological significance of the details of Human Anatomy. With a view to introducing students properly to the study of Practical Anatomy, they are taught by section demonstrations how to dissect and what to seek for in the part to be dissected. Besides the demonstrators who are detailed to guide the student through the various steps of dissection, a specially prepared anatomical outline on every region of the human body is furnished to the student for his guidance. The aim is to stimulate accurate and careful technique in the art of dissection, exactness of observation, and independence of judgment on the part of the student. The descriptive course in Anatomy is conducted by means of lectures, recitations, demonstrations on the cadaver, dry and wet anatomical preparations, and charts and models, of which latter liberal use is made in order to illustrate the lectures and demonstrations. In the course of Neurology the student dissects a sheep brain in order to gain some knowledge of the morphological relations of the general divisions of the brain, and then makes a careful study of the human brain and spinal cord by means of horizontal, coronal and sagittal sections, which is further followed by a microscopic study of the central nervous system and the organs of the special senses.

The dissecting material is abundant, thoroughly preserved by the latest scientific processes of embalming, scrupulously clean, and absolutely free from offensive odors or infective qualities.

Students who are suitably qualified and physicians who desire to do advanced work in Anatomy will receive every encouragement which the department is able to offer. From among those students who show the greatest proficiency, **prosectors are appointed** who do special dissection work and quizzing under the direction of the Professor and assistants.

**(a) GROSS ANATOMY.**

**Course 1. Freshman Anatomy.** The course in Freshman Anatomy includes the study of Osteology, Arthology, Myology, Angiology (including the heart), Respiratory and Digestive Systems, Neurology of the extremities, and dissection of the upper and lower extremities. Lectures and Recitation, 90 hours; Laboratory Exercises, 216 hours. Total, Professor White and Assistants, 306 hours.

**Course 2. Sophomore Anatomy.** The course in Sophomore Anatomy includes the study and dissection of the Head, Neck, Thoracic and Abdominal organs, the Perineum, Ductless Glands, Genito-Urinary Organs, Respiratory, Circulatory, and Digestive Systems, **organs of the Special Senses, Human Brain, Spinal Cord, and Sympathetic Nervous System.** This course is a continuation of the first year, but from the standpoint of the application, and not as an abstract science. It embraces the outlines, positions, and relations of the various organs and the means of recognizing them, thus giving a knowledge necessary for diagnostic and operative purposes. The bones are studied individually and collectively, the student pointing out and describing the different parts from actual specimens. Bones are loaned to the students for private study. Lectures, Demonstrations and Recitations, 108 hours; Laboratory Exercises, 216 hours; Total, Professor White and Assistants, 324 hours.

**Course 3. Surgical Applied Anatomy and Operative Surgery** on the cadaver is taught in the third year. (Associate Professor Criley, 36 hours.)

**(b) HISTOLOGY**

**Course 1.** Elementary Histology is given during the Freshman year. The study of fresh tissue, disassociation methods, and the technique in the preparation of fixed and hardened tissues is given the student. All the elementary tissue of the body, including normal blood, etc., are studied. (Prof. White and Assistants, 162 hours.)

**Course 2.** Histology of the Central Nervous System is taught during the Sophomore year. (Prof. White and Assistant, 54 hours.)

**(c) EMBRYOLOGY**

Embryology is taught by didactic instruction and laboratory work during the Freshman year. Lectures and quizzes

on the structure of germ cells, the decidua, and the placenta are given at the beginning of the course. Following this, the student is required to prepare and mount embryo chicks, illustrating development up to and including the differentiation of the somites. Lectures and recitations in human embryology are a part of this course. The students are required to make drawings and diagrams of the folding in of the layers of the embryo, including the histology of the foetal membranes. The complete histogenesis of the principal organs of the body is studied. The students are required to prepare their own sections, from which demonstrations and drawings are made. The equipment in this department is complete and consists of incubators, charts, models, and all the usual necessary histological and embryological material. (Prof. White and Assistants, 108 hours.)

#### TEXT BOOKS

**Anatomy.** Gray (New English Edition), Cunningham, Cunningham's "Manual of Dissection," Piersol, Morris.

Atlases and Collateral Reading: Quain's "Anatomy"; Holden; McClellan's "Regional Anatomy"; Deaver's "Surgical Anatomy"; Edinger's "Anatomy of the Nervous System"; Huntington's "Anatomy of the Peritoneum and Abdominal Cavity"; Sobotta and McMurrich's "Atlas of Human Anatomy"; Toldt's "Atlas of Human Anatomy"; Spalteholz's "Atlas of Anatomy."

**Histology.** Bailey; Bohm; Davidoff; Huber; Piersol; Schaeffer; Jordan & Ferguson.

**Embryology.** Prentiss; Bailey; "Human Embryology" by Kieble and Mall; McMurrich; Heissler.

## DIVISION II. CHEMISTRY, TOXICOLOGY AND DIETETICS

FREDERICK S. HAMMETT, A.B., M.S., A.M., Ph.D.  
Professor of Biological Chemistry

IRVIN KARSNER SEARLE, B.S., A.M.  
Instructor in Chemistry

### (a) CHEMISTRY

Although this school now requires a two-years college course as a pre-medical requisite, which includes an adequate amount of chemical fundamentals, the Department of Chemistry spends some little time in review of elementary Inorganic, Physical and Organic Chemistry, adding to this

review an elaboration as introduction to Biological Chemistry. It is the aim of the department to instil into the minds of the medical students the fact that chemistry in its relations to medicine is not ephemeral but of direct practical applicability.

**Course 1. General Inorganic Chemistry.** First year students. Given during the first half of the first semester. This course comprises a review of the properties of the elements, their compounds and reactions. Especial attention is paid to the radio-active elements and the ideas underlying their practical application.

**Course 2. General Organic Chemistry.** First year students. Given during the last half of the first semester. Instruction in this course is designed to give a secure foundation in the fundamental principles underlying the chemistry of the carbon compounds. Elaboration is along the lines of study of the compounds and reactions of direct practical application to Biological Chemistry.

**Course 3. Toxicology.** First year students. During the work given in Courses 1 and 2, due consideration is given to the toxic properties of the elements and compounds studied, together with their antidotes and methods of detection in alimentary content, excreta or tissues.

**Course 4. Introduction to Biological Chemistry.** First year students. Entire first semester. The object of this course is to prepare the way for an intelligent conception of the reactions of the body. It is concerned with the theoretical considerations on which clinical analysis is based, such as the preparation of standard solutions and the theory of indicators. It takes up the mass-law, the mechanism for the maintenance of the recation of the blood, the physical chemistry of protoplasm, including a study of osmosis, surface tension, and ionization. The colloid state and its properties are studied as well as the ideas underlying enzyme action.

**Course 5. Biological Chemistry** First year students. Entire second semester. Instruction in this course is confined to the practical application of the science of chemistry to the study of the human body. It includes the metabolic and regulative functions of the tissue, the chemical nature of food-stuffs, their metabolism and excretion.

**Course 6. Advanced Chemistry.** Second year students. Entire second semester. This course comprises all that is given in Course 5.



**Course 7. Advanced Biological Chemistry I.** Elective. An opportunity is here offered for the student to prepare compounds of biological interest such as amino-acids, fats. etc. Hours to be arranged.

**Course 8. Advanced Biological Chemistry II.** Elective. This special course aims to give an intensive study of protein metabolism and nitrogen excretion, special attention being given to the effect of diet on the composition of urine and a knowledge of the methods for accurate analysis of excreta. Hours to be arranged.

**Course 9. Research in Bio-Chemistry.** Elective. This course is offered to provide opportunity for qualified students to pursue bio-chemical research under the supervision of the department. Collaboration with clinical work is possible if desired. Hours to be arranged.

**Course 10. Bio-Chemical Seminar.** The object of the Seminar is to enable the medical student not only to keep pace with the progress of this branch of medical science, but to also familiarize himself with methods of scientific thinking and procedure. Discussions are open and free. Hours to be arranged.

#### **TOTAL NUMBER OF HOURS IN ENTIRE COURSE**

Freshman Chemistry and Toxicology—90 hours didactic, 108 hours laboratory.

Freshman Bio-Chemistry—90 hours didactic, 162 hours laboratory.

Sophomore Chemistry—90 hours didactic.

Sophomore Bio-Chemistry—36 hours laboratory.

Total—Prof. Hammett and Mr. Searle (270 hours didactic, 306 hours laboratory), 576 hours.

#### **(b) DIETETICS**

For third year students. One hour per week during the first semester. This course gives an outline of the factors of nutrition, their practical significance and a discussion of the modern theories of diet with which the practitioner may come in contact, together with the scientific data underlying their usefulness. (Prof. Hammett, 18 hours.)



## REFERENCE BOOKS

Inorganic Chemistry: Smith; Remsen.

Organic Chemistry: Cohen; Perkin & Kipping; Remsen; Moore.

Toxicology: \*Holland.

Physiological Chemistry: \*Mathews; Hammarstein; Hawk.

Laboratory Manual: \*Tolin.

Dietetics: \*Bryce; Luck.

---

\*Students must provide themselves with these books.

## DIVISION III. PHYSIOLOGY AND PHARMACOLOGY

ARTHUR D. BUSH, B.S., M.D.

Professor of Physiology and Pharmacology

HERBERT W. CUMMINGS, B.S.

Instructor in Physiology

## (a) PHYSIOLOGY

Instruction in this department will be such as to furnish thorough information concerning the living body in its normal condition. While frequent references will be made to illuminating facts in comparative physiology, yet the principal study both in the class room and in the laboratory will be human physiology. Emphasis will be placed on that information which will be of greatest utility to the student in his professional activities. This information will be largely obtained by determining how in the human body the general laws of physiology are manifested. The methods of instruction will consist of lectures, oral and written recitations, demonstrations, laboratory studies, conferences and seminar.

**Course 1. First Year Physiology.** Lectures, recitations and conferences. This course deals with physiology of Skeletal and Muscular tissues, the interrelation of Muscle Groups, Nerve-Muscle physiology, Reflex action, and the physiology of the Circulatory and Respiratory systems.

**Course 2. Laboratory, First Year Physiology.** This course has two aims. The first is to give a training in carefulness of observation, accuracy in notation, and logicalness of deduction. For this preliminary training a few of the classic experiments in general physiology will be utilized. The second aim is to give the student an intimate working acquaintance with the functioning body. For this purpose an extended series of experiments in applied physiology has been arranged in close correlation with the subject matter of Course

1; these experiments give the student a comprehensive first-hand information concerning the leading phenomena of human physiology. Students working in pairs will be required to hand in written daily reports of all experiments, incorporating graphic records and tabulated observations. The investigation method will be used exclusively, to the end that through the careful selection and correlation of fundamental facts the student shall acquire habits of discriminating observation and deductive analysis.

**Course 3. Second Year Physiology.** Lectures, recitations and conferences. This course deals with the physiology of Digestion, Absorption, Secretion, Excretion, Metabolism, the sense Organs, Central Nervous System, and the Reproductive System.

**Course 4. Laboratory, Second Year Physiology.** Work closely correlated with Course 3 while continuing the principles and methods of Course 2.

**Course 5. Research in Physiology.** A course devoted to the training in method, and to the investigation of original and assigned problems. Open to those students only who have shown especial aptitude and ability in physiology.

**Course 6. Seminar in Physiology.** For the presentation of these and for the discussion of papers, problems and reviews.

#### TOTAL NUMBER OF HOURS

Didactic—Freshman.....	90	Laboratory—Freshman .....	216
Didactic—Sophomore.....	36	Laboratory—Sophomore..	72
	<hr/>		<hr/>
	126		288
Total number hours Prof. Bush and Mr. Cummings....		414	

#### (b) PHARMACOLOGY

**Course 1. Physiological Action of Drugs.** Lectures, recitations, demonstrations and conferences. (Second Year Students.) This course will consist of a thorough discussion of the way and manner in which the living organism responds to the more important drugs. Each drug considered will be studied in relation to its specific action on the several systems of the body, and the different symptoms produced by varying doses.

**Course 2. Laboratory Work in Pharmacodynamics.** A series of carefully selected studies of the effects of leading drugs on the several systems, with comparative observations of these effects on the lower animals and on man. The investigation method is used exclusively, each student discovering pharmacologic information by actual experimentation on various animals, including man. Students will work in groups, and will keep careful records, both graphic and written, of all experimentation, credits being assigned for carefulness in observation, precision in tabulation, and accuracy in deduction.

**Course 3. Research in Pharmacodynamics.** A course whose object is to carefully train students in the methods of research, and to assist them in the successful investigation of original and assigned problems. Open to those students only who have shown especial aptitude and ability in Pharmacology.

**Course 4. Seminar in Pharmacology.** For the presentation of theses and for the discussion of pharmacology papers, problems and reviews.

#### TOTAL NUMBER OF HOURS

Didactic, 54; Laboratory, 72.....126

#### TEXT BOOKS

##### Physiology:

Class room—Howells.

Laboratory—Lombard; Bush.

Reference—Stewart; Starling; Tigerstedt; Bayliss.

##### Pharmacology:

Class room—Cushny; Bush.

Laboratory—Bush.

Reference—Sollman; U. S. Dispensatory.

## DIVISION IV. PATHOLOGY, BACTERIOLOGY AND CLINICAL MICROSCOPY

T. H. GLENN, A.B., Ph.D., M.D.

Professor of Pathology, Bacteriology and Clinical Microscopy

PAUL K. SELLEW, M.D.

Instructor in Pathology

### (a) BACTERIOLOGY

This is a practical course in which students become familiar with the preparation of culture media, principles of steriliza-

tion and disinfection, methods of cultivating, staining and studying the most important pathogenic bacteria. Lectures will be given during the laboratory course devoted to the consideration of subjects pertaining to infection and immunity. Recitations will cover the work done in the laboratory by the student as well as the subjects treated in the lectures and text book study. (Prof. Glenn, 162 hours during the sophomore year.)

### **(b) GENERAL PATHOLOGY**

**Course 1.** Pathological Histology is taught as a part of pathological anatomy. The description and the demonstration of the gross lesion are followed by microscopical examination. The lectures will be devoted to a consideration of the etiology and pathology of disease. Recitations will cover the work done in the laboratory as well as subjects treated in the lectures and text book assignments.

**Course 2.** Study of infectious granulomas and tumors. This course will be given as a part of general pathology. (Prof. Glenn and Dr. Sellew, 324 hours during the sophomore year.)

**Course 3. Special Pathology.** This course is a study of the pathological processes affecting special organs and tissues. Lectures, recitations, demonstrations and laboratory work. (Prof. Glenn and Dr. Sellew, 72 hours during junior year.)

### **(c) CLINICAL MICROSCOPY**

This course is given by lectures, laboratory work and recitations during the junior year. It consists of chemical and microscopical examination of urine, blood, gastric contents, faeces, sputum, smears and cultures, etc. The material comes from the hospital and dispensaries. Lectures will be devoted to a consideration of the interpretation of the laboratory findings, together with the practical application of the laboratory work in the study and diagnosis of diseases. (Prof. Glenn, 108 hours during junior year.)

### **(d) AUTOPSIES**

Practical instruction is given in the methods of making post-mortem examinations and of recording results. The student studies and describes the gross and microscopical ap-



pearance of diseased organs and tissue. Bacteriological and chemical examinations are made when essential. This course is given in sections at County Hospital. (Prof. Glenn, 48 hours each section, junior year.)

### **(e) ADVANCED WORK AND RESEARCH**

Open to properly qualified students or graduates in medicine.

### **(f) HYGIENE**

Owing to the rapid advances which have been made in the science of medicine in the last few years, State Medicine and Hygiene has become a very important branch of this science. The subject is taught by reports and laboratory work for 36 hours in the Junior year and 72 hours' class room work throughout the Senior year.

Hygiene as applied to preservation of health and prevention of disease will be studied, especial attention being given to the pure food law, adulterations, dilutions and labeling, etc. School room and sick room hygiene will be covered. Especial consideration is given the subject of Eugenics and the effect of hereditary influences on health. Hygiene of air, soil, water, climate, food and diet; food supply, food diseases and adulterations; heating, lighting and ventilating of dwellings; municipal sanitation and water supply, sewage and drainage, disposal of refuse; the prevention of contagious diseases, including tropical diseases; the laws regulating quarantine, etc.; in fact, all branches of Preventive Medicine, Hygiene and Sanitation will be thoroughly given. In order that the importance of this branch may be more fully impressed on the student, eighteen hours during the year will be devoted to work in the laboratory. At this time the student will be required to make chemical and bacteriological analyses of water, milk and butter, together with tests for preservatives in canned meats, fruits and vegetables. (Prof. Glenn and Dr. Sellew, Junior year, 36 hours; Senior year, 72 hours.) (Total, 108 hours.)

#### **TEXT BOOKS**

**Bacteriology.** \*Jordan, General Bacteriology; \*Heinemann, A Laboratory Guide in Bacteriology; Hiss & Zinser: Park & Williams; McFarland; Buchanan.

---

\*Text books recommended.



**Pathology.** \*Ziegler, \*Dellafield & Prudden, \*Adami Systemic Pathology; Adami & Nicol; Stengel & Fox; Wells Chemical Pathology; Mallory & Wright, Pathological Technique; Kaufman; Mallory; Coplin; Cattell; Durck.

**Clinical Microscopy.** \*Sahli; Webster; Wood; \*Emerson; Simon; \*Cabot on Blood.

## DIVISION V. MATERIA MEDICA AND THERAPEUTICS

EDWARD DOUGLASS JONES, M.D.  
Associate Professor of Therapeutics

OTTO BAMES, M.D.  
Lecturer on Materia Medica

RAY A. CARTER, M.A., M.D.  
Instructor in Materia Medica

FORREST C. SWEARINGEN, S. B., M.D., RUFUS ANDREW HOLT, JR., M.D.  
Instructors in Therapeutics

**Course 1.** First year students are given instruction in the study of drugs. First each drug will be considered in its crude and primary state, the botany of the various plant and vegetable elements entering into the basic principles of our materia medica, together with the different and individual alkaloids of each, as well as the mineral elements, basic as well as analytic, from the view point of materia medica.

This department is supplied with crude drugs and standard preparations for direct demonstration, which enables each student to familiarize himself with not only the appearance, but the odor, the taste and general characteristics of each. Laboratory facilities are at hand for demonstrating the pharmacognosy and the pharmacology of each drug and compound, while the student is referred to the Department of Physiology for the pharmacodynamics of drug therapy, elementary. (Dr. Carter, 36 hours.)

**Course 2.** The Sophomore or second year students receive instruction in advanced materia medica, including prescription writing, dosage, etc., in all of its complications, with an outline of elementary therapeutics and toxicology, with the view of preparing the student for applied therapeutics as taught in the Department of Therapeutics and General Medicine. The student must know the Materia Medica as well as the Pharmacognosy, Pharmacology and Pharmacodynamics of drugs before he can know drug therapy. (Dr. Bames, 54 hours.)

**Course 3. Therapeutics.** Junior year students devote three hours each week, throughout the second and third trimesters, to this branch of the work. The method employed in teaching this department is didactic and clinical, with recitative review of the most important subjects, from time to time, supplemented by clinical instruction at regular periods throughout the year. A portion of the time is devoted to the practical side of toxicology and to the study and application of prescription writing. One hour weekly, both semesters of the Junior year. (Dr. Swearingen, first semester; Dr. Holt, second semester, 36 hours.)

**Course 4. Therapeutics.** The Senior students devote one hour each week throughout the entire college year to this branch of the work. It is intended to divide the class into sections of some four to ten members in each section and assign to each section from time to time certain patients afflicted with the disorder desired to be studied, and they are required to write a complete history of the cases presented, outline a method of management according to their own previous knowledge, and then during a class conference they are corrected, criticized, quizzed and instructed in the various recognized methods of treatment and management of the diseases under consideration, supplemented from time to time with didactic teaching upon such subjects as may be deemed advisable to present in this manner or in illustration of which it is inconvenient or impracticable to obtain suitable cases. (Associate Prof. Jones, 36 hours.)

#### TEXT BOOKS

**Materia Medica.** Bastedo.

**Therapeutics.** Shoemaker; Potter; Butler; Wood; Forchheimer; Hare.

### DIVISION VI. MEDICINE AND MEDICAL SPECIALTIES

FREDERICK A. SPEIK, S.B., M.D., THOMPSON B. WRIGHT, A.M., M.D., Professors of Medicine.

JAMES TUCKER FISHER, M.D., Professor of Neurology and Psychiatry.

CHARLES M. MANGER, Ph.G., M.D., Professor of Neuropathology and Clinical Neurology.

CHARLES C. BROWNING, M.D., F. M. POTTENGER, A.M., M.D., LL.D., Professors of Diseases of the Chest.

ALBERT SOILAND, M.D., Professor of Roentgenology.

HENRY HERBERT, M.D., Associate Professor of Medicine.

ANSTRUTHER DAVIDSON, C.M., M.B., M.D., Associate Professor of Dermatology.

- EDWARD DOUGLASS JONES, M.D., Associate Professor of Therapeutics.
- HENRY DIETRICH, M.D., Associate Professor of Pediatrics.
- WALTER F. WESSELS, M.D., Associate Professor of Medicine.
- JOHN VINCENT BARROW, S.B., M.D., FRANK JAMES LEAVITT, M.D., Assistant Professors of Medicine.
- ERNEST BRYANT HOAG, A.M., M.D., Assistant Professor of Pediatrics.
- LEWIS D. REMINGTON, M.D., Assistant Professor of Diseases of the Chest.
- PETER C. REMONDINO, M.D., Lecturer on History of Medicine and Medical Bibliography.
- H. E. McDONALD, M.D., Lecturer on Life Insurance Examinations.
- GEORGE L. GREER, A.B., LL.B., Lecturer on Medical Jurisprudence.
- A. F. MAISCH, M.D., A. S. GRANGER, A.B., M.D., Lecturers on Medicine.
- A. J. SCOTT, JR., M.D., Lecturer on Pediatrics.
- LEON SHULMAN, M.D., Lecturer on Diseases of the Chest.
- R. S. CUMMINGS, M.D., DWIGHT S. MOORE, M.D., ADRIAN B. PERKEY, M.D., FRANK CROWELL BISHOP, M.D., LOUIS M. KANE, A.B., M.D., JOHN MARK LACEY, M.D., H. GALLAGHER, M.D., C. A. SMALLEY, M.D., C. A. JOHNSON, A.B., M.D., ROBERT B. HILL, M.D., A. F. GODIN, M.D., Instructors in Medicine.
- M. J. ROBERTS, M.D., J. EUGENE FAHY, A.B., M.D., G. E. PATRIC, M.D., R. C. MacCLOSKEY, M.D., Instructors in Diseases of the Chest.
- WM. B. KERN, M.D., Instructor in Psychiatry.
- ROBERT M. DUNSMOOR, M.D., Instructor in Electrotherapy.
- CHESTER H. BOWERS, A.M., M.D., HARRY M. BRANDEL, M.D., Instructors in Pediatrics.

### **(a) MEDICINE**

**Course 1. Normal Physical Diagnosis.** Three hours each week, during the second semester of the Sophomore year, are devoted to lectures and demonstrations in Normal Physical Diagnosis. This work includes the regional topographical anatomy of the body, the rules governing inspection, palpation, percussion, auscultation, mensuration, including a short course on the signs and symptoms of general diagnosis. In this course specific symptomatology is avoided. (Dr. Kane, 54 hours.)

**Course 2. Didactic Physical Diagnosis.** In the Junior year, one hour each week is given in didactic instruction on charts, model, by drawings, diagrams and on living subjects. (Associate Prof. Herbert, 36 hours.)

**Course 3. Clinical Physical Diagnosis.** In the Junior year, practical instruction is given Mondays at the County Hospital. History writing constitutes a material part of the work of this course. (Associate Professor Herbert, Drs. Leavitt, Shulman, Perkey, Godin and Gallagher, 72 hours each section.)

**Course 4. Junior Didactic Medicine.** During the Junior year, three hours each week are devoted to didactic and recitative instruction. The work is of a thoroughly practical nature and embraces a study of Internal Diseases generally, Parasitic Diseases, Infectious Diseases, Constitutional Diseases and the Diseases of the Lungs, Heart and Blood-vessels, Liver, Stomach and Intestines, Pancreas, Kidneys, Spleen and Lymphatic System, Blood and Ductless Glands. (Prof. Wright, Associate Professor Wessels, Drs. Leavitt and Shulman, 144 hours.)

**Course 5. Junior Clinical Medicine.** Clinics and conference courses at the bedside in the Los Angeles County Hospital are given on Thursdays, 10 to 11 a. m., and Fridays, 10 a. m. to 12 m. exclusive of the work given in Physical Diagnosis). Prof. Wright, Prof. Browning, Drs. Cummings, Maisch, Granger, and Assistants. **Total, 120 hours each section.)**

**Course 6. Senior Didactic General Medicine.** The Senior students receive didactic and recitative instruction in General Medicine, covering the subjects given in clinic and conference at the Los Angeles County Hospital. See Course 10. (Prof. Speik, Assoc. Prof. Wessels, and Dr. Barrow. **Total, 72 hours.)**

**Course 7. Senior Tropical Medicine** is taught in the Senior year one hour each week for twenty-four weeks. Clinic cases are seen at the Los Angeles County Hospital whenever possible. (Dr. Johnson, first and second semesters, 24 hours.)

**Course 8. Senior Infectious Diseases,** with special reference to Immunity is taught in the Senior year, last twelve weeks. (Dr. Johnson, 12 hours.)

**Course 9. Senior Clinical Contagious Diseases.** Clinic and Conference course, with special reference to Applied Therapeutics. (Dr. A. J. Scott, Tuesdays, 8 to 10 a. m., 24 hours each section.)

**Course 10. Senior Clinical Medicine.**

- (a) **Diseases of the Alimentary Tract and Liver.** Clinic and Conference course at the Los Angeles County Hospital. First twelve weeks (Assoc. Prof. Wessels, Tuesdays, 10 a. m. to 12 m., 24 hours.) Second twelve weeks (Prof. Speik, Wednesdays, 10 a. m., to 12 m., 24 hours.)



- (b) **Infectious Diseases**, with special attention given to Applied Therapeutics, clinic and conference course at the Los Angeles County Hospital. (First twelve weeks, Dr. Barrows, Mondays, 10 a. m. to 12 m., 24 hours.) (Second twelve weeks, Prof. Wright, Tuesdays, 10 a. m. to 12 m., 24 hours.)
- (c) **Diseases of the Heart, Blood Vessels and Kidneys.** Clinics and Conference course at the Los Angeles County Hospital. (First twelve weeks, Prof. Speik, Wednesdays, 10 a. m. to 12 m., 24 hours.) (Third twelve weeks, Dr. Barrow, Tuesdays, 10 a. m. to 12 m., 24 hours.)
- (d) **Diseases of Blood and Ductless Glands**, with special reference to Applied Therapeutics. Clinic and conference course, at Los Angeles County Hospital. (Second twelve weeks, Dr. Barrow, Mondays, 10 a. m. to 12 m., 24 hours.) (Third twelve weeks, Assoc. Prof. Wessels, Wednesdays, 10 a. m. to 12 m., 24 hours.)
- (e) **Diseases of Metabolism and Constitutional Diseases.** Clinic and conference course at the Los Angeles County Hospital, with special reference to Applied Therapeutics. (Third twelve weeks, Prof. Speik, Mondays, 10 a. m. to 12 m., 24 hours.)

Total number of hours, Course 10, 216 hours.

**Course 11. Senior Clinical Medical Tuberculosis.** Clinic and conference course at the Los Angeles County Hospital. This course is given in sections of seven students. (Prof. Browning and Assistants, 24 hours each section.)

**Course 12. Senior Didactic Medical Tuberculosis.** One hour each week during the Senior year is devoted to didactic work in Medical Tuberculosis. (Prof. Pottenger, 36 hours.)

## **(b) PEDIATRICS**

**Course 1. Junior Class. The Principles of Pediatrics.** A conference and didactic course comprising the anatomy, physiology and hygiene of infancy and childhood, and the dietetics of infancy, as a foundation for the work in the Senior Class. (Drs. Scott, Brandel and Bowers, 60 hours.)

**Course 2. Senior Class Didactic and Recitative Instruction** one hour each week. (Dr. Dietrich, 36 hours.)



**Course 3.** A bedside clinic and conference course at the Los Angeles County Hospital. Topics, first trimester, The Dietetics of Infancy; Infant Feeding. (Dr. Dietrich, Thursdays, 10-12, 24 hours.) Topics, second trimester, The Commoner Diseases of Infancy, Including Rickets, Scurvy, Congenital Syphilis; Tuberculosis and Infectious Diseases. (Dr. Dietrich, Thursdays, 10-12, 24 hours.)

### **(c) NERVOUS AND MENTAL DISEASES**

**Course 1.** The course in Neurology and Psychiatry in the Junior year consists of lectures and clinics at the College Dispensary and County Hospital. (Prof. Fisher, 36 hours didactic and 24 hours clinical instruction each section). (Total, 60 hours.)

**Course 2.** A course in Pathology of the Nervous System is given one hour each week during the second trimester and two hours each week during the third trimester of the Junior year. (Prof. Manger, 36 hours.)

**Course 3.** Senior Class. **Neurology.** Didactic and Recitative conference in Diseases of the Nervous System and Psychiatry. (Prof. Manger and Assistants, 72 hours.)

**Course 4.** Clinic and conference course in Diseases of the Nervous System and Psychiatry at the Los Angeles County and Psychopathic Hospitals. (Prof. Manger and Assistants, Thursday, third trimester, 24 hours.)

### **(d) DERMATOLOGY**

Dermatology, embracing within its scope Syphilography, has been taken from the Department of Genito-Urinary Diseases and placed in a separate department. This course embraces one hour each week throughout the Senior year. The subject-matter covered will be the histo-pathology and bacteriology of the skin, the relations of diseases of the skin to other diseases and to other organs, the individual study of all cutaneous affections, and their diagnosis and latest methods of treatment, including X-ray therapy. The cutaneous manifestations of the various eruptive fevers, their diagnosis and clinical values, will also be considered. Syphilis and its effects, direct and remote, upon healthy and diseased organs, together with the most modern methods of diagnosis and treatment, will be thoroughly studied throughout the year. Dr. Lovejoy (24 didactic hours, 24 clinic hours). (Total, 48 hours.)

**(e) ROENTGENOLOGY AND ELECTROTHERAPY**

**Course 1. Electricity.** One lecture a week will be given in the first half of the Senior year covering the source, characteristics, physiological action, and therapeutics of each of the electrical currents used in medicine.

**Course 2. Roentgenology.** Lectures and demonstrations during the last half of the Senior year will deal with the X-ray tube, transformers and accessories in their relation to practical Roentgenology. Radium and Light will be included in the consideration of radiotherapy. The class will have access to a complete X-ray laboratory. The apparatus for the Oudin, D'Arsonval, and Tesla high frequency currents, together with the usual wall plate selector, will be available for demonstration throughout the year. (Prof. Soiland and Dr. Dunsmoor, 36 hours.)

**(f) MEDICAL JURISPRUDENCE**

Lectures will be given on the following subjects: Legal relations of physician to patient, and patient to physician, including rights to compensation collection of fees, malpractice; legal relation of physician to government, including government regulation of practice, power to protect public health, nuisance and their abatement, adulteration of foods; elementary general principles of law, knowledge of which frequently is required by and useful to physicians, including wills, estates of insane and deceased persons, crimes of violence, rights of children, negligence; legal aspects of mental disorders and diseases, including testamentary capacity, criminal responsibility of insane, alcoholism and drug addictions, legal incompetency to contract, care for and custody of insane; property rights of insane; personal injuries by violence (a) in civil damage cases, and (b) in criminal cases, including rules of evidence, medico-legal inspection, autopsies (a) to ascertain cause of death, and (b) to obtain evidence of manner of infliction, suicide; toxicology, sex perversions, pregnancy, disease and divorce; life and accident insurance; expert and opinion evidence, including the medical witness, his position, rights and duties.

Efforts will be made in this department to familiarize students with the proper methods of practice and procedure in all matters wherein the practitioner of medicine is likely to come in contact with the law or the government, and especially in that large class of cases where accurate knowledge of legal requirements is called for upon the instant. The lack

of such knowledge frequently has enacted great embarrassment, both to the courts and to the medical profession. (George L. Greer, Attorney-at-Law, 36 hours.)

### **(g) HISTORY OF MEDICINE AND MEDICAL BIBLIOGRAPHY**

Dr. P. C. Remondino of San Diego, Cal., will deliver, during the session of 1916-17, a series of lectures to the entire student body upon that most interesting and instructive topic, History of Medicine and Medical Bibliography. This subject has been added to and made a part of the curriculum of this College. Dr. Remondino has been selected to present this course, he being a man of finished scholarly attainments, and his inherent ability, together with his broad and comprehensive knowledge of this subject, the results of a lifelong study and research into the seemingly impenetrable mysteries of the history of medicine, is an evidence of his peculiar fitness to make this course interesting and instructive. During the coming year Dr. Remondino will begin his course with a lecture on the medicine of the ancient Arcadians, during which he will trace the similarity of their Shamanic medicine, the ancient race relationship existing between the Laplander of Northern Europe and the ancient Tauranian races that once inhabited the plains and mountains of Babylonia. Following this, the medicine of the Aboriginal American, Oceanic and African Tribes will form the subject of the next lectures, during which the enlightened state of the medicine of the Malayan Indians of Yucatan will be traced in its origin to early Egyptian sources. The next lectures will be devoted to the elucidation of the states of Egyptian, Hindoo and Greek medicine prior to its pre-Hippocratic era. Then will follow the Hippocratic and Alexandrian, the Roman and the Arabian, with the period of Renaissance in Europe in the Sixteenth Century. In fact, a review of Medicine from the earliest possible obtainable history down to and including the present, will be given.

The above outline of the course will suffice to call the attention of the student along these lines to the opportunities offered here in this too oft neglected department. We believe that the broad-minded, up-to-date medical man should know at least something of the history of his profession. (Dr. Remondino, 6 hours.)

**(h) LIFE INSURANCE EXAMINATION**

A series of lectures will be given to the Junior class on Life Insurance Examination, the subjects being: (1) The Life Insurance Institution, (2) The Family History, (3) The Personal History, (4) The Physical Examination, (5) The Laboratory Examination, (6) The Prognosis. (Dr. MacDonald, 6 hours.)

**(i) MEDICAL ETHICS AND ECONOMICS**

This college, in keeping pace with the advancements being made in medical teaching and training, has adopted the recommendation of the Educational Council of the American Medical Association and added to its curriculum a department of Medical Ethics and Economics. The young man or woman taking a degree from a medical institution must go forth, usually illy prepared, to take and to occupy that high position and place in the professional and business world that should be expected of them. This course will consist of twelve lectures to the Senior class during the second semester upon the fundamental business principles so essential to the success of the young practitioner, the duties of the medical man to himself, to his confreres, to his patients, and to the public at large, the relation that should exist between the medical man and the druggist, the Church, and the State, etc., etc. This course will aim to inculcate into the mind of the student that broad spirit of altruism which should regulate and control the relations existing between mankind. This course will embrace and set forth that true spirit of fraternization that should permeate the ranks of the medical profession, that spirit of brotherly love, which seems to have been forgotten by the medical fraternity in its onward and rapid progress. The basic principles of organization and unity will be outlined, and, in fact, medical sociology will be woven into a strong and durable fabric which we believe will redound greatly to the future benefit of those who go out into the world, to accomplish better things by better methods. (Prof. Bryson and Seymour, 12 hours.)

**TEXT BOOKS**

**Medicine—Practice.** Anders; Osler; Tyson; Edwards; Manson, Jackson, Herchfelder. **Diagnosis:** Butler (for Sophomores); Osler; Butler; Emerson; Anders-Boston; Cabot's Diseases of the Blood; Todd's Manual of Clinical Diagnosis; Da-Costa; C. B. Slade, "Physical Examination and Diagnosis"; Mussel.



**Pediatrics:** Grulee; Holt; Kerley. **Collateral Reading:** Rotch; Koplik; Chapin; Jacobi; Kerr; Kerley; Pfaundler and Schlossman; Holt.

**Neurology and Psychiatry:** Dana; Starr; "Outlines of Psychiatry," by William A. White; Church and Peterson.

**Dermatology:** Stelwagon; Schamberg; Hartzell.

**Electro-Therapeutics:** Potts, Electricity, Medical and Surgical; McIntosh, Practical Hand-Book of Medical Electricity; "X-Rays, How to Produce Them," by Mowat.

**Medical Jurisprudence:** Draper; Witthaus and Becker Forensic; "Medicine and Toxicology," Peterson and Haines.

## DIVISION VII. SURGERY AND SURGICAL SPECIALTIES

JAMES HARVEY SEYMOUR, M.D., ORVILLE O. WITHERBEE, M.D., Professors of Surgery and Clinical Surgery.

CHARLES WILLIAM BRYSON, A.B., M.D., Professor of Abdominal and Clinical Surgery.

WILLIAM LEANDER ZUILL, M.D., JOHN JOHNSON KYLE, B.S., M.D., Professors of Otolaryngology and Rhinology.

THOMAS JEFFERSON McCOY, M.D., Professor of Ophthalmology.

CHARLES H. WHITMAN, M.D., Professor of Clinical Surgery.

FITCH C. E. MATTISON, M.D., W. W. RICHARDSON, M.D., Professors of Surgery.

GEORGE JESSE LUND, M.D., Associate Professor of Otolaryngology and Rhinology.

GEORGE WASHINGTON McCOY, A.M., M.D., Associate Professor of Ophthalmology.

P. C. H. PAHL, M.D., Associate Professor of Orthopedic Surgery, Fractures and Dislocations.

WALTER LESLIE HUGGINS, Ph.B., M.D., Associate Professor of Surgery.

W. H. KIGER, M.D., Lecturer on Proctology.

CHARLES EATON PHILLIPS, A.B., M.D., Assistant Professor of Surgery.

HARLAN SHOEMAKER, A.B., M.D., FRED E. LETTICE, M.D., A. T. CHARLTON, A.B., M.D., L. G. AVERY, A.B., M.D., C. H. CRILEY, Ph.B., M.D., Lecturers on Surgery.

C. F. NELSON, M.D., WM. H. GILBERT, M.D., L. LORE RIGGIN, Ph.B., M.D., CHAS. S. YOUNG, M.D., F. K. COLLINS, M.D., W. A. MORRISON, A.B., M.D., Instructors in Surgery.

ROSS A. HARRIS, M.D., Instructor in Ophthalmology.

SIMON H. JESBERG, M.D., Instructor in Diseases of Eye, Ear, Nose and Throat.

### (a) SURGERY

The course of teaching in this department embraces both didactic and clinical methods and consists of the following:

**Course 1. Minor Surgery and Bandaging.** Two hours each week during the last semester of the Sophomore year will be



devoted to Minor Surgery and Bandaging, together with the general principles of Anaesthesia. Minor Surgery, in its broadest sense, as taught in the Sophomore year, will lay the foundation for the Junior and Senior Surgical courses. Anaesthesia, that most reliable and dependable adjunct to the field of operative, surgical science, will be treated minutely, broadly and comprehensively to round out the Sophomore's ideas and knowledge of these subjects as a foundation. (Dr. Avery, 36 hours.)

**Course 2. Junior Surgery.** In the Junior year a thorough and systematic course is given in the fundamental and basic principles of Surgery. This course is conducted along the lines which have proved the most satisfactory and thorough in the up-to-date and foremost medical institutions throughout the country, and consists in lectures, recitations, quizzes, ward walks, close bedside demonstrations and instructions, history writing, case taking, and the actual participation in the treatment and management of all varieties of surgical conditions. This Junior work would not be complete without the postmortem study of various cases that have been under observation in ward and clinic. The Junior Class is divided into sections. Clinical material is abundant in all departments, and each student in each section in each department receives ample personal and the very best collective instruction.

**Didactic:** (Drs Huggins, Phillips and Shoemaker, 108 hours.)

**Clinical:** (Drs. Huggins, Shoemaker, Phillips, Criley, Avery, Mackenzie, Riggin, Young and Nelson 96 hours.)

Total .....204 hours.

**Course 3. Fractures and Dislocations** is taught during the Junior year. In this course the didactic and mechanical instruction is supplemented by bedside observation at both the college clinic and in the wards of the County Hospital. Here are taught and shown the latest methods in treatment of fractures and dislocations, the adjustment of splints, the application of plaster casts, jackets, and other appliances. (Dr. Lettice, 36 hours.)

**Course 4. Proctology.** Clinical material is abundant, and clinics are conducted at the County Hospital regularly, and will include digital, proctoscopic examinations and operative work, with sufficient didactic and recitative hours to round out the course in this too often neglected surgical specialty.

(Dr. Kiger, 18 didactic hours, Junior year; 24 clinical hours Senior year.)

**Course 5.** The course in **Senior Surgery** is designed to be essentially an operative one, covering the entire range of General Surgery, and will be conducted four mornings each week, from 8 to 10 a. m., in the General Operative Amphitheater at the County Hospital. This clinic is for Senior students and will embrace within its scope not only the surgical technique along with the surgical procedures, but will include the pre- and post-operative management of each case presented. It is presumed that the student has been trained in his Sophomore and Junior years in the fundamentals; that the foundation has been laid broad and firm in his course, and that his mind is receptive to the pre-conditions, the operative technique and the post-operative procedures and conditions, together with the things to be avoided and the dangers to be looked for and dreaded along the lines of this work. The Senior students are also working in college clinic and in Out-Patient department, and when the student finishes his work here in this school he has had proper training and his foundation is broad and ample. This clinic course is interspersed with didactic, recitative and quiz periods, which serves to round out the course in the most adequate manner.

**Didactic:** (Prof. Seymour, 72 hours.)

**Clinical:** (Profs. Seymour, Witherbee, Mattison and Richardson, 216 hours.)

Total .....288 hours.

## (b) ORTHOPEDIC SURGERY

**Orthopedic Surgery** is given through the Junior year, and consists of didactic work, with extensive clinical demonstration two hours each week at the County Hospital. This course will include instruction in the application and adjustment of orthopedic apparatus; the theory and practice of the treatment of tubercular bone diseases by mechanical means, and by the hygienic-dietetic treatment; the treatment of scoliosis by Abbot's correction, jackets and felt pads, gymnastics, electricity, and massage; treatment of talipes and flat-foot; the management of infantile paralysis; and practical work in the plaster room as well as operative hospital work. Dr. Pahl, (Didactic), 36 hours; Dr. Phillips (Clinic) each section, 24 hours. (Total, 60 hours.)

**(c) GENITO-URINARY DISEASES**

This course comprises a series of lectures and clinical demonstrations throughout the Senior year, and is limited to Senior students. In the didactic course, the anatomy, histology, embryology and physiology of the entire genito-urinary tract is reviewed, such time being spent on this as to insure a thorough knowledge of the fundamental principle of this subject, and then the diseases of the various organs are taken up separately, special attention being given to the pathological changes and their diagnosis.

The operative procedures are taught on the cadaver, and the students are required to go through the various steps of each operation under the guidance of the instructor. The diagnosis is gone into with each pathological condition as it is being studied, but, preliminary to this, special instruction is given in palpation and percussion and various other methods pertaining to genito-urinary diseases in general, individual instruction being given in the use of the cystoscope, urethroscope and catheterization of ureters, etc. These lectures will be illustrated by a series of clinical demonstrations upon material from the College Clinic and at the County Hospital. (Drs. Dakin and Rosenkranz, 36 didactic hours, 24 clinic hours each section.) (Total, 60 hours.)

**(d) OTOLOGY, LARYNGOLOGY AND RHINOLOGY**

The work in this department is so arranged as to give the student the broadest possible acquaintance with the clinical side of this subject. This is done by dividing the class into sections so that each section will have three hours of clinical work in the College Dispensary in addition to the County Hospital Work.

The didactic work of the department consists of one lecture hour each week in addition to frequent recitations and reviews. The student has every opportunity to familiarize himself thoroughly with all the practical details of this subject, and his knowledge of the subject taught is frequently tested by both oral and written reviews.

The didactic course begins with a careful study of the Anatomical details of the Ear, Nose and Throat and their accessory sinuses. Second, lectures on the influences of general diseases upon these special organs, and also the influence which diseases of these organs exert upon the general condition and health of the patient. Third, methods of examination of ear, nose and throat and special consideration of the

diseases affecting them. Fourth, a careful study of the diseases of the accessory sinuses. Fifth, operations. (Profs. Zuill and Kyle and Assoc. Prof. Lund, 36 didactic hours, 24 clinical hours each section.) (Total, 60 hours.)

### (e) OPHTHALMOLOGY

This course on diseases of the eye will consist of one didactic hour each week in the Junior year, and two clinical hours per week in the Senior year, illustrated by the disease in the patient, by charts and blackboard drawings. Minor operations are performed before the class at the College Clinic, and major operations at the County Hospital. Ample material is presented at both clinics. Practical instructions on the eye are given in general, the recognition, differentiation and treatment of the common, as well as the complicated diseases and injuries, the principles and clinical instructions on refraction, the uses of the ophthalmoscope, the recognition of diseases of the eye as diagnostic of disease in remote organs. Much effort is made in the teaching of this subject to make it interesting and impressive to the student. (Prof. Thos. J. McCoy and Assoc. Prof. George W. McCoy, 36 didactic hours, 24 clinic hours each section.) (Total, 60 hours.)

#### TEXT BOOKS

**General Surgery.** DaCosta; Wyeth; Lexer-Bevan; Scudder's Treatment of Fractures; Stimson on Fractures and Dislocations; Bryan's Principles of Surgery. (Operative Surgery) Bryant; Bickham; Treaves; Keen. (Minor Surgery) Foote; "Bandaging" by Whiting.

**Orthopedic Surgery.** Whitman; Bradford and Lovett; Young; Willard.

**Genito-Urinary Diseases.** No one text book is followed in the course, but the students of this branch are recommended to buy various texts, and thereby the class has the advantage of the different authors writing on this subject. Works recommended are Casper; Kreissel; Fynger; Corner; Keyes; White and Matin; Morrow's System; Deaver's Diseases of the Prostrate Gland; and various texts on Anatomy, Histology and Embryology used in other departments of the school.

**Otology, Laryngology and Rhinology.** The collateral reading advised on this subject is such works as D. Braden Kyle, "Diseases of Nose and Throat;" J. J. Kyle, 3rd Edition.



"Diseases of Ear, Nose and Throat;" Bishop on "Diseases of the Nose, Throat and Ear;" Bacon on "Otology;" Barnhill-Wales, Modern Otology; Packard, Diseases of Nose, Throat and Ear.

**Ophthalmology.** May; Fox; De Schweinitz, or Fuchs.

## DIVISION VIII. OBSTETRICS, GYNECOLOGY AND ABDOMINAL SURGERY

CHARLES WILLIAM BRYSON, A.B., M.D.

LYLE GILLETTE McNEILE, M.D.,  
Professors of Obstetrics

HENRY E. SOUTHWORTH, M.D.  
Associate Professor of Gynecology

HENRY W. HOWARD, M.D.  
Assistant Professor of Gynecology

PHIL BOLLER, A.B., M.D.  
Lecturer on Gynecology

M. G. VARIAN, M.D., A. J. DOWNS, M.D.  
Instructors in Gynecology

EDGAR ALLEN, M.D., A. A. BLATHERWICK, M.D., LYMAN E. THAYER, M.D., JOHN C. IRWIN, B.A., M.D.  
Instructors in Obstetrics

### (a) OBSTETRICS

**Course 1. Junior Didactic Obstetrics.** Instruction in Obstetrics is begun in the third year, and is carried on by means of didactic lectures, recitations and demonstrations, upon the manikin and living subject; by the use of charts, wet and dry specimens, models and pelves.

The subject matter during this year embraces the anatomy of the pelvis, physiology, and development of the ovum, normal pregnancy, normal labor and normal puerpery. (Prof. McNeile 12 hours, Drs. Allen, Irwin and Thayer, 96 hours. (Total, 108 hours.)

**Course 2. Clinical Obstetrics.** Los Angeles County Hospital. Dr. McNeile, 24 hours.

**Course 3. Senior Didactic Obstetrics.** Lectures and recitations are continued during the fourth year, at which time the complications and difficulties liable to be encountered in the practice of the science and art of obstetrics are successively considered, viz., abnormal pregnancy, dystocia, and abnormal puerpa. Special attention is given to asepsis, external palpation, pelvimetry, the use of forceps, and the different obstetric operations. The maternity wards of the County Hospital and the many charitable cases coming under the care of this department afford ample material for prac-



tical demonstration, thus giving the student a thorough working knowledge of the subject. (Prof. McNeile, 72 hours.)

**Course 4. Senior Clinical Obstetrics.** Students in their fourth year are assigned in rotation to the Obstetric Dispensary, where they remain in residence for two weeks. The Dispensary is located in the most thickly populated district of Los Angeles, and annually handles from three hundred to five hundred confinement cases. During his residence the student personally examines all women applying for care during confinement, and is carefully instructed in ante-partum care, pelvimetry, and blood pressure estimates during pregnancy. Each student conducts from twelve to fifteen labors, under the supervision of the Obstetric Attending Staff, and witnesses from twenty to fifty labors in the clinics of the Dispensary, County Hospital and other allied institutions. After delivery the student visits the mother and babe each day for ten days, accustoming himself to the care of normal cases, and gaining recognition of abnormal conditions. The student is taught a definite and minute aseptic technique and system in obstetric work, all of his work being done under the immediate supervision of the Professor and his assistants.

During his service the student also attends the Obstetrical Clinics held weekly at each of our stations. At these stations over thirty ante-partum and post-partum cases are examined each week. Under careful supervision the student examines each case, recording his findings on a standard obstetrical history sheet. In the clinics special attention is given to internal and external pelvimetry, accurate diagnosis of presentation and position, diagnosis and treatment of the complications arising during pregnancy, and careful final examination of patients who have been recently delivered by the Department.

## **(b) GYNECOLOGY AND ABDOMINAL SURGERY**

**Course 1. Junior Gynecology.** This course is given to the Junior Class in amphitheatre, college and hospital clinics, and consists of lectures, recitations, manikin, chart and drawing demonstrations, dispensary work and bedside and ward clinics at the County Hospital. The Junior Class is divided into sections, under competent instructors, and are required to write histories, examine patients, suggest diagnosis, treatment and management in individual cases, go over again the anatomy and physiology of the female generative plexus, are taken over and over again the etiology of diseases they see,

and thus have the foundation of Gynecology laid broadly and well. This course prepares the student for work given in the Senior year. (Assoc. Prof. Southworth, 36 didactic hours, 24 clinic hours each section.) (Total, 60 hours.)

**Course 2. Senior Clinical Gynecology and Abdominal Surgery.** This course is given at the County Hospital and consists of two hours each week in the Surgical Operating Amphitheatre, where the entire class witness and have explained to them minutely the different methods and the various technique, as well as the post-operative care of patients. Students will be divided into small classes, the better to enable them to witness closely the technique of examination and manipulations. (Prof. Bryson, 72 clinic hours.)

**Course 3. Senior Clinical Gynecology.** While in the clinics at the College Dispensary, students are required to examine, diagnose and treat patients in the presence of the professor in charge, in order to become proficient in gynecological diagnosis and treatment. In thus bringing the student in close personal relation with a large number and variety of cases, he familiarizes himself with the different methods of examining patients, and at the same time he becomes accustomed to making diagnoses and formulating treatment, as well as witnessing closely and assisting at all of the minor and major operations in gynecology and abdominal surgery. Diseases of the bladder and urethra will be thoroughly covered in this department and their medical and surgical treatment outlined and demonstrated. Methods of inspection and examination will be taught by the use of charts and manikins, as well as upon living subjects. The practical manipulation and use of the cystoscope will be shown first upon bladder phantoms, then upon the living subject in the Clinical Department. A thorough theoretical as well as practical knowledge of Gynecology and Abdominal Surgery in its broadest scope is a prerequisite to graduation from this college, and every opportunity will be offered the student to prepare himself for the arduous duties that will come to him in his professional career.

**Course 4. Senior Didactic Gynecology and Abdominal Surgery.** In order to make complete this course and round out the student's knowledge of the important subject of Gynecology and Abdominal Surgery, two hours each week will be devoted to lectures and recitations in the College Amphitheatre to the Senior class upon the more fundamental subjects embraced in this department. This course will be illus-

trated by charts, drawings, models and projectoscope, and will embrace important matters, detail measures and methods that cannot be given for lack of time in the Clinic Operating Amphitheatre. There are many basic essentials, which I maintain the properly equipped young graduate must have, and which must be given in these didactic conferences. Why? Because at a clinic period when several major cases must be operated, time is a valuable asset, the safety of the patients calls for rapid action, and many essentials are necessarily passed over. If the eye can see at the time the ear hears, it is well; but, to see without fully understanding is sometimes confusing; therefore this course of seventy-two hours illustrative conferences to round out the course following: (Prof. Bryson, 72 didactic hours, 72 clinical hours.) (Total, 144 hours.)

#### TEXT BOOKS

**Obstetrics.** De Lee; Cragin; Williams; Edgar.

**Gynecology and Abdominal Surgery.** Ashton; Gilliam; Montgomery; Dudley; Reed; Crossen; Kelly's Operative Gynecology; Surgical Diseases of Abdomen, by Douglas; Abdominal Operations, by Moynihan.

# THE COLLEGE OF LAW

## FOREWORD

The prospective law student should appreciate that his efficiency as a student depends, to a large extent, upon his preliminary education; his success as a lawyer, upon systematic legal training. Instruction obtained from experienced teachers of law will result not only in more thorough, but in more speedy preparation than the more desultory reading in a lawyer's office. The most noteworthy feature in the progress of legal education in the United States has been the growth of law schools, both in number and in efficiency. Familiarity with the routine work of a lawyer's office is of value to the prospective lawyer, but should be preceded by thorough training in the principles of law. The course of study covered by the law school embraces the entire field of law, and is designed to develop the student and fit him for the active duties of a practicing lawyer.

### Association of American Law Schools

The College of Law, University of Southern California, is a member of the Association of American Law Schools.

### Admission to the Bar

Upon graduation from the College of Law, University of Southern California, the student is granted the degree of Juris Doctor (J.D.) or Bachelor of Laws (LL.B.), and is admitted to the bar upon motion, without examination.

### ADVANTAGES OF LOCATION

The home of the College of Law of the University of Southern California is ideally located, both for the purpose of securing the highest class of instructors and for the convenience and training of the students. It is in the center of hundreds of law offices and close to the courts. The practice of many members of our staff of instruction is such that if teaching should require them to give up the practice of law, no school could pay salaries sufficient to secure their services. To the student of law the Law Library and the lawyer's office are what the laboratory is to the medical stu-



dent. Many of our Seniors and some of the members of the First and Second Year Classes do work in law offices, or at least have office and library privileges.

The quarters in the Tajo building, corner of First street and Broadway, occupy all of the fourth and fifth floors.

### **The Courts**

The Supreme Court of the State holds two sessions each year in Los Angeles, and the students have opportunity to hear carefully prepared arguments by the ablest lawyers of the country, and are required to attend Court not less than ten days each semester.

The United States District Court is held here, and opportunity for study of the Federal practice and procedure is thus offered, on both the law and the equity sides.

The Appellate Court for the Southern District of California holds its session in Los Angeles.

The Superior Court of Los Angeles County, consisting of eighteen departments, is in session the entire year.

Four city Police Courts and four Township Justice's Courts, in which students can get some actual practice before admission to the bar, are in session daily during the entire year.

### **Library Facilities**

Students are allowed the use of the Los Angeles County Law Library, consisting of thirty thousand (30,000) volumes, upon the same terms as members of the Bar.

The College of Law has a good working library of its own, consisting of State Reports, the Reporter System, the English Reports, and Text and other case books, numbering in all 8,500 volumes.

### **Eastern Students**

To the increasing number of Eastern students spending a few years in Southern California, special opportunity is given for fitting for the practice of law. Those intending to practice in common-law states should notice that an entire semester is devoted to the study of common-law pleading. **It is the aim to fit the graduates of this College to practice law in any state.**

### **CONDITIONS OF ADMISSION**

There are three classes of admission: (a) Admission to the first year class. (b) Admission as a special student. (c) Admission to advanced standing.



(a) Admission to the first year class of candidates for degrees. The requirements are the same as for admission to the College of Liberal Arts (see pages 39 to 46), i. e., a four year high school course including certain prescribed subjects. Candidates presenting evidence of having completed such a course in an accredited secondary school may be admitted without examination, but where such evidence is not presented entrance examinations must be passed.

Application should first be made to the Registrar of the University at the College of Liberal Arts, 35th Street and University Avenue, to whom all credentials for entrance work should be presented. If the admission requirements are found to be satisfied the Registrar will issue a Certificate of Admission which must then be presented to the Dean of the College of Law together with two certificates of character. Applicant must be at least eighteen years of age.

The Registrar's office is open throughout the year and prospective students are urged to make application before the formal registration dates.

**b. Special Students.** The Dean may admit as a special student (not candidate for a degree) an applicant of business experience who is twenty-one years of age, or over, who has not the required qualifications.

**c. Admission to Advanced Standing.** Applicants for admission to the second or third-year classes must present certificates of the completion by them of work equivalent to that for which they seek to be credited. Certificates will be accepted when issued by a law school belonging to the Association of American Law Schools, or by other colleges of law whose requirements are as high and whose course is as extensive as that here given. Applicants for advanced standing not having such certificates must pass examination in the subjects for which they seek credit, but any student who desires to take such an examination must first secure permission to do so from the Dean. Such examinations are given only at the beginning of a semester. A charge of five dollars is made for each special examination.

## DEGREES

The various courses of study lead to the following degrees:

The degree of Master of Laws (LL.M.) may be conferred upon those students who hold the degree of Bachelor of Laws (LL.B.) from this, or an approved institution maintaining a three year's course of study, and who have completed

in this department the fourth year of work prescribed by this College of Law.

The degree of Juris Doctor (J.D.) is conferred upon those students who have received the degree of Bachelor of Arts (A.B.) or a substantially equivalent degree in the University of Southern California, or in an approved College or University; who have pursued the study of law in this department for three years and completed in full the curriculum prescribed by this College of Law, or who have completed two years in an approved Law School and taken the third year in this College; and who have maintained a standard of scholarship for the three-year course of at least eighty-five per cent. The A. B. degree must have been secured before entering upon the third year of work in the College of Law.

The degree of Bachelor of Laws (LL.B.) is conferred upon students who are graduates of a high school maintaining a four-year course of study, or of another educational institution of equivalent rank, who have pursued the study of law in this College for three years, or in any approved Law School for two years followed by one year in this College, completing in full the course prescribed in this institution; and who have maintained throughout a standard of scholarship of at least seventy-five per cent in every subject.

Credit received in Summer Session will count toward such degrees.

When a student in the College of Liberal Arts has received 94 semester credits (including all prescribed work) and of these has taken not less than 32 in the College of Liberal Arts of the University of Southern California, he may enter the College of Law, and may receive the degree of Bachelor of Arts upon the satisfactory completion of two years in the professional course, and the degree of Juris Doctor upon graduation a year later. For details see under College of Liberal Arts.

## PRE-LEGAL COURSE

It is important that the student be thoroughly prepared before commencing the study of law. It is therefore recommended that he take the three-year Pre-Legal Course as outlined below in the College of Liberal Arts before entering the College of Law.

**First Year****BOTH SEMESTERS**

	Units per Semester
English 1 (Composition).....	3
Economics 1 (Principles).....	3
History 1 (English).....	2
A laboratory Science or Mathematics.....	4 or 5
Foreign Language* .....	5

**Second Year****BOTH SEMESTERS**

English 30 (English Literature).....	2
Economics 2 and 3 (Money and Banking, Finance).....	3
History 14 (English Constitutional).....	2
Psychology .....	3
Political Science .....	2
Public Speaking .....	2
Foreign Language .....	3

**Third Year****FIRST SEMESTER**

Economics 9 (Municipal Problems).....	3
Sociology 2 (Principles).....	3
History 16 (American Government).....	3
Logic .....	3
Ethics .....	2
Debate and Argumentation .....	2

**SECOND SEMESTER**

Economics (Labor Problems).....	3
Sociology (Immigration or Criminology).....	2 or 3
History 16 (American Government).....	3
Elective in Philosophy.....	3 or 2
Parties and Governments of Europe.....	3
Debate and Argumentation.....	2

\*In cases where Elementary Latin is offered as a college entrance subject the foreign language may be French or German or Spanish. When not offered as an entrance subject, Latin is prescribed.

## ATTENDANCE AND SCHOLARSHIP

The Dean calls attention to the privilege extended to law students of taking four hours of instruction, free, at the College of Liberal Arts. By taking advantage of this privilege, a student may get selected portions of a college course.

A grade of 75%, or over, on examinations and daily work in each subject, is required for promotion or graduation.

In textbook or case courses in which there is a daily quiz the daily work counts for 60% and the final examination for 40%.

Absences detract from scholarship. Each absence in excess of one in a one period course, two in a two period course, and three in a three period course per semester, will receive a zero mark. If, however, the student files upon return to class an abstract of work done during his absence, the zero mark may be advanced to a maximum grade of 85%, depending upon the merit of the brief. Promotion is not granted in any subject when the attendance falls below 60%.

Persons twenty-one years of age, or over, not studying for a degree, may, by permission of the Dean, enter the College of Law as special students, and may pursue such studies as they desire. This provision is made especially for the aid of those seeking or holding positions of trust in banks and other business institutions.

Any student displaying deficiencies in English diction or usage may at any time be required to take instruction in the class in Expression.

The school reserves the right to expel any student whenever the Board of Control deems it necessary for the welfare of the College of Law, and to suspend any student or use other methods of discipline, whenever such action is deemed advisable by the Dean.

**Special Examinations.** Any student registering for the regular course who desires to take a special examination on any subject must file in the office a petition asking for the privilege and stating his reasons therefor. The petition is referred to the Dean. If the permission is granted, a special examination may be given. Such examination and all examinations for advanced standing are given at the beginning of a semester. Passing grade upon all such examinations is eighty-five per cent.

## THE CURRICULUM

The following courses are grouped under four heads: those of the regular session, those of the night school, those of the graduate course, and certain courses offered in the Summer School.

### I. THE REGULAR SESSION

The purpose of the course is to impart a sound and thorough legal education, and to qualify students for admission to practice in all the courts of this or any other State, and in the Federal Court.

The method of instruction is a combination of the lecture, text-book, and case systems, with practical experience in briefing and pleading. Attention is called to the fact that courses are given in Briefing and the Use of Books. In addition to the briefs required in Practice Court work, the members of the Faculty assign subjects for briefs in connection with their respective classes.

On account of the large number of students enrolled, the classes are divided into several sections. These meet at different times of the day, so that students may select a section to suit their own convenience.

All regular students of the law department are entitled to four hours of instruction per week in the College of Liberal Arts without additional cost.

In addition to the subjects listed in the following schedule, special lectures are provided during the year upon subjects which, though not really required in a legal course, are yet of much value to those desiring a well-rounded knowledge of the law.

The duration of each period specified below is one and one-half hours.

#### First Year

##### FIRST SEMESTER

Contracts (Two Periods).....	Clair S. Tappaan
Criminal Law (Two Periods).....	
.....Paul J. McCormick and Percy V. Hammon	
Elementary Law and Blackstone (Three Perods).....	
.....Gavin W. Craig	
Torts (Two Periods).....	Kemper B. Campbell
Bailments (Two Periods).....	Frank M. Porter



Debating (One Period) Beulah Wright, Gertrude Comstock,  
 Hugh Neal Wells.  
 Practice Court (One Period)

#### SECOND SEMESTER

Contracts, including Quasi Contracts, Partnership,  
 Agency and Guaranty and Suretyship (Three Per-  
 iods).....Clair S. Tappaan  
 Criminal Procedure (Penal Code and Selected Cases  
 (One Period))..Paul J. McCormick and Percy V. Hammon  
 Torts (Two Periods).....Kemper B. Campbell  
 Personal Property and Sales (Two Periods).....  
 .....Frank M. Porter and Chas. E. Millikan  
 Domestic Relations (One Period).....Vincent Morgan  
 Debating (One Period)..Beulah Wright, Gertrude Comstock,  
 and Hugh Neal Wells.  
 Statutory Interpretation (One Period).....T. W. Robinson  
 Patents (One Period).....F. L. A. Graham  
 Practice Court (One Period)

### Second Year

#### FIRST SEMESTER

Common Law Pleading (Two Periods)....Victor R. McLucas  
 Private Corporations (One Period).....Frederick W. Houser  
 Real Property (Two Periods).....Kemper B. Campbell  
 Equity Jurisprudence and Procedure (Two Periods).....  
 .....Chas. C. Montgomery  
 Constitutional Law (Two Periods).....James S. McKnight  
 Bills and Notes (Two Periods).....Clair S. Tappaan  
 Practice Court (One Period)

#### SECOND SEMESTER

Private Corporations (One Period).....Frederick W. Houser  
 Equity Jurisprudence and Procedure (Two Periods).....  
 .....Chas. C. Montgomery  
 Real Property (Two Periods).....Kemper B. Campbell  
 Mining Law (One Period).....Lewis A. Groff  
 Wills and Probate Practice (Three Periods).....  
 .....Victor R. McLucas  
 Research (One Period).....Victor R. McLucas  
 Water Rights and Irrigation Law (One Period).....  
 .....Gavin W. Craig  
 Practice Court (One Period)

## Third Year

## FIRST SEMESTER

Code Pleading (Two Periods).....	James G. Scarborough
Evidence (Three Periods).....	Frank M. Porter
Public Corporations (Two Periods).....	Byron C. Hanna
Federal Jurisdiction and Procedure (One Period).....	
.....	Chas. C. Montgomery
Conveyancing (One Period).....	W. S. Allen
Conflict of Laws (Two Periods).....	Victor R. McLucas
Practice Court (One Period)	

## SECOND SEMESTER

Code Pleading (Two Periods).....	James G. Scarborough
Real Property (Two Periods).....	Vincent Morgan
Evidence (Three Periods).....	Frank M. Porter
Damages (One Period).....	Frank P. Doherty
Insurance (One Period).....	Seward A. Simons
Securities (One Period).....	Gavin W. Craig
Admiralty (One Period).....	E. W. Tuttle
Appeals (Lectures) .....	James A. Gibson
Land Titles (Lectures).....	O. R. W. Robinson
Legal Ethics (Lectures).....	Benjamin F. Bledsoe
Bankruptcy (Nine Lectures).....	W. T. Craig
Practice Court (One Period)	

## II. EVENING SESSION

In response to a general demand for night classes in law, an Evening Session was established at the beginning of the year 1908-1909. The night course consists of the same subjects as the day course, but requires four years and three summers for completion. The instructors are the same as those of the Day School. Graduates of the Evening Session receive the degree of Bachelor of Laws (LL.B.), and under the laws of the State of California are admitted to the Bar without examination.

Only three years of the Evening Session are taught each year, the third and fourth years alternating.

**First Year****FIRST SEMESTER**

Contracts (Two Periods).....	Clair S. Tappaan
Criminal Law (Two Periods).....	Percy V. Hammon
Elementary Law and Blackstone (Three Periods).....	
.....	Gavin W. Craig

**SECOND SEMESTER**

Contracts (Three Periods).....	Clair S. Tappaan
Criminal Procedure (One Period).....	Percy V. Hammon
Bailments (Two Periods).....	Frank M. Porter
Personal Property and Sales (Two Periods).....	
.....	Frank M. Porter and Chas. E. Millikan

**SUMMER**

Domestic Relations (One Period).....	Vincent Morgan
Patents (One Period).....	F. L. A. Graham

**Second Year****FIRST SEMESTER**

Torts (Two Periods).....	Kemper B. Campbell
Private Corporations (One Period).....	Frederick W. Houser
Common Law Pleading (Two Periods).....	Victor R. McLucas
Bills and Notes (Two Periods).....	Clair S. Tappaan
Debating (One Period).....	Hugh Neal Wells
Practice Court (One Period)	

**SECOND SEMESTER**

Torts (Two Periods).....	Kemper B. Campbell
Mining Law (One Period).....	Lewis A. Groff
Private Corporations (One Period).....	Frederick W. Houser
Research (One Period).....	Victor R. McLucas
Bankruptcy (Nine Lectures).....	W. T. Craig
Debating (One Period).....	Hugh Neal Wells
Practice Court (One Period)	

**SUMMER**

Statutory Interpretation (One Period).....	T. W. Robinson
Damages (One Period).....	Frank P. Doherty
Insurance (One Period).....	Seward A. Simons

**Third Year**  
(Offered 1916-1917)

**FIRST SEMESTER**

Evidence (Three Periods).....Frank M. Porter  
 Conflict of Laws (Two Periods).....Victor R. McLucas  
 Equity Jurisprudence and Procedure (Two Periods).....  
 .....Chas. C. Montgomery  
 Practice Court (One Period)

**SECOND SEMESTER**

Evidence (Three Periods).....Frank M. Porter  
 Equity Jurisprudence and Procedure (Two Periods).....  
 .....Chas. C. Montgomery  
 Water Rights (One Period).....Gavin W. Craig  
 Admiralty (One Period).....E. W. Tuttle  
 Practice Court (One Period)

**SUMMER**

Federal Jurisdiction and Procedure (One Period).....  
 .....Chas. C. Montgomery  
 Securities (One Period).....Gavin W. Craig  
 Conveyancing (One Period).....W. S. Allen

**Fourth Year**  
(Offered 1917-1918)

**FIRST SEMESTER**

Code Pleading (Two Periods).....Vincent Morgan  
 Junior Real Property (Two Periods).....Kemper B. Campbell  
 Constitutional Law (Two Periods).....James S. McKnight  
 Public Corporations (Two Periods).....Byron C. Hanna  
 Practice Court (One Period)

**SECOND SEMESTER**

Code Pleading (Two Periods).....Vincent Morgan  
 Junior Real Property (Two Periods).....Kemper B. Campbell  
 Senior Real Property (Two Periods).....Vincent Morgan  
 Wills and Probate Practice (Three Periods).....  
 .....Victor R. McLucas  
 Legal Ethics (Lectures).....Benjamin F. Bledsoe  
 Appeals (Lectures).....James A. Gibson  
 Land Titles (Lectures).....O. R. W. Robinson  
 Practice Court (One Period)

**FIRST SEMESTER SCHEDULE, 1916-1917, DAY SCHOOL**

**Instruction beginning September 14, 1916**

Hour	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>Freshman, Sec. I.</b>	8:00 A. M. Ele. Law	Bailments	Ele. Law	Bailments	Ele. Law	Crim. Law
	5:15 P. M. Contracts	Torts	Contracts	Crim. Law	Torts	
	7:00 P. M. Sec. I, Debating	Prac. Court				
<b>Freshman, Sec. II.</b>	8:00 A. M. Sec. II, Debating					
	8:45 A. M. Bailments	Ele. Law	Bailments	Ele. Law	Torts	Ele. Law
	10:15 A. M. Crim. Law	Torts	Contracts	Crim. Law	Contracts	
	12:15 P. M.	Sec. III, Debating	Sec. IV, Debating			
	5:15 P. M.					
	7:00 P. M.	Prac. Court				
<b>Junior, Sec. I.</b>	8:00 A. M. Bills & Notes	Real Prop.	Pri. Corps.	Bills & Notes	Real Prop.	Const. Law
	5:15 P. M. Eq. Jur.	Com. Law Pl.	Eq. Jur.	Com. Law Pl.	Const. Law	
	7:00 P. M.	Prac. Court				
<b>Junior, Sec. II.</b>	9:15 A. M.					Const. Law
	10:15 A. M. Eq. Jur.	Com. Law Pl.	Eq. Jur.	Com. Law Pl.	Const. Law	
	12:15 P. M. Bills & Notes	Real Prop.	Pri. Corps.	Bills & Notes	Real Prop.	
	7:00 P. M.	Prac. Court				
<b>Senior, Sec. I.</b>	8:00 A. M. Evidence	Conf. of Laws	Evidence	Conf. of Laws	Evidence	Fed. Jur. & Pro.
	5:15 P. M. Code Pl.	Pub. Corps.	Conveyancing	Pub. Corps.	Code Pl.	
	7:00 P. M.	Prac. Court				
<b>Senior, Sec. II.</b>	8:00 A. M. Evidence	Conf. of Laws	Evidence	Conf. of Laws	Evidence	Fed. Jur. & Pro.
	12:15 P. M. Code Pl.	Pub. Corps.	Conveyancing	Pub. Corps.	Code Pl.	
	5:15 P. M.					
	7:00 P. M.	Prac. Court				



# **FIRST SEMESTER SCHEDULE, 1916-1917** **NIGHT SCHOOL**

First Year	Hour	Monday	Tuesday	Wednesday	Thursday	Friday
	7:00 P. M.	Contracts		Ele. Law	Ele. Law	Crim. Law
	8:15 P. M.	Contracts		Ele. Law		Crim. Law
Second Year	7:00 P. M.	Com. Law Pl.	Prac. Court	Bills & Notes	Pri. Corps.	Torts
	8:15 P. M.	Com. Law Pl.	Prac. Court	Bills & Notes	Debating	Torts
Third Year	7:00 P. M.	Evidence	Prac. Court	Conf. of Laws	Evidence	Eq. Jur.
	8:15 P. M.	Evidence	Prac. Court	Conf. of Laws		Eq. Jur.
Fourth Year	7:00 P. M.	Const. Law	Prac. Court	Pub. Corps.	Junior Real Prop.	Code Pl.
	8:15 P. M.	Const. Law	Prac. Court	Pub. Corps.	Junior Real Prop.	Code Pl.

Fourth Year will be given in 1917-1918.

Third Year will be given in 1918-1919.

# SECOND SEMESTER SCHEDULE, 1916-1917, DAY SCHOOL

Instruction beginning January 30, 1917

Freshman, Sec. I.	Hour		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	8:00 A. M.	5:15 P. M.	Stat. Int.	Pers. Prop. & Sales.	Crim. Pro.	Pers. Prop. & Sales	Dom. Rel.	Patents
Freshman, Sec. II.	7:00 P. M.		Contracts	Torts	Contracts	Contracts	Torts	
	8:00 A. M.		Sec. I, Debating	Prac. Court			Sec. I, Debating	
	9:15 A. M.		Sec. II, Debating					Patents
	10:15 A. M.		Pers. Prop. & Sales	Torts	Dom. Rel.	Pers. Prop. & Sales	Torts	
	12:15 P. M.		Stat. Int.	Contracts	Contracts	Crim. Pro.	Contracts	
Junior, Sec. I	1:30 P. M.		Sec. II, Debating			Sec. III Debating		
	7:00 P. M.			Prac. Court				
	8:00 A. M.		Wills	Real. Prop.	Pri. Corps.	Wills	Real Prop.	Water Rts.
	5:15 P. M.		Eq. Jur.	Wills	Eq. Jur.	Research	Mining Law	
	7:00 P. M.			Prac. Court				
Junior, Sec. II.	9:15 A. M.							Water Rts.
	10:15 A. M.		Eq. Jur.	Wills	Eq. Jur.	Wills	Mining Law	
	12:15 P. M.		Wills	Real Prop.	Pri. Corps.	Research	Real Prop.	
	7:00 P. M.			Prac. Court				
	8:00 A. M.		Evidence	Insurance	Evidence	Securities	Evidence	Admiralty
Senior, Sec. I.	5:15 P. M.		Code Pl.	Real Prop.	Damages	Real Prop.	Code Pl.	
	7:00 P. M.			Prac. Court	Bankruptcy			
	8:00 A. M.			Insurance				Admiralty
	12:15 P. M.		Evidence		Evidence	Securities	Evidence	
	5:15 P. M.		Code Pl.	Real Prop.	Damages	Real Prop.	Code Pl.	
Senior, Sec. II.	7:00 P. M.			Prac. Court	Bankruptcy			

# **SECOND SEMESTER SCHEDULE, 1916-1917** **NIGHT SCHOOL**

<b>First Year</b>	<b>Hour</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
	7:00 P. M.	Contracts	Contracts	Bailments	Crim. Pro.	Pers. Prop. & Sales
	8:15 P. M.	Contracts		Bailments		Pers. Prop. & Sales
<b>Second Year</b>	7:00 P. M.	Mining Law	Prac. Court	Bankruptcy	Pri. Corps.	Torts
	8:15 P. M.	Debating	Prac. Court	Research		Torts
<b>Third Year</b>	7:00 P. M.	Evidence	Prac. Court	Water Rts.	Evidence	Eq. Jur.
	8:15 P. M.	Evidence	Prac. Court	Admiralty		Eq. Jur.
<b>Fourth Year</b>	7:00 P. M.	Wills	Prac. Court	S. Real Prop.	Junior Real Prop.	Code Pl.
	8:15 P. M.	Wills	Prac. Court	S. Real Prop.	Junior Real Prop.	Code Pl.

Fourth Year will be given in 1917-1918.  
Third Year will be given in 1918-1919.

### III. GRADUATE COURSE

A graduate course of one year is given. Upon those who have previously received the degree of Bachelor of Laws (LL.B.) from this or any Law School that is a member of the Association of American Law Schools, or from any other approved Law School maintaining a three-year undergraduate course, the degree of Master of Laws (LL.M.) may be conferred upon the completion of an approved course of graduate study equivalent to ten yearly periods.

The following is the course of study leading to the degree of Master of Laws (LL.M.):

International Law (One Period).....	William Hazlett
Spanish and Mexican Land and Mining Law (Twelve Lectures) .....	Warren E. Lloyd
Interstate Commerce (Twelve Lectures).....	E. W. Camp
Public Officers (Ten Lectures).....	Walter F. Haas
Logic (One Period).....	Festus Edward Owen
Fraternal Insurance (Six Lectures).....	Carlos S. Hardy
Medical Jurisprudence (Ten Lectures).....	Carlos S. Hardy
Civil Law (One Period).....	Thomas A. Berkebile
Philosophy of Law (One Period).....	Warren E. Lloyd
History of Jurisprudence (One Period).....	Lewis A. Groff
California Codes (One Period).....	Byron C. Hanna
Comparative Constitutional Law.....	Thomas A. Berkebile
Restraints of Trade (One Period).....	Chas. C. Montgomery
Extraordinary Provisional Remedies (One Period).....	Thomas C. Berkebile
Public Commission (One Period).....	Chas. C. Montgomery
History of the Common Law (One Period).....	E. W. Tuttle
Jurisdiction and Judgments (One Period).....	Chas. C. Montgomery

A part of the course will consist of the completion of a thesis embodying the results of an investigation on some subject in law. It is required that this shall be a piece of original and serious research, demonstrating the writer's power of original thought, his thorough grasp of the subject matter involved, and his ability to present his material in a scholarly manner and style. The thesis must contain not less than 5000 words. The subject must be presented to the Dean for approval by December 1st; a fairly complete bibliography must be similarly presented by February 1st; and the completed thesis must be submitted to the Dean not later than May 1st.

#### IV. THE SUMMER SCHOOL

The Summer Session of the College of Law affords to those who expect to earn a part, or all, of their expenses while going through school, an opportunity to lessen the amount of study required for the following year. In addition, it furnishes an opportunity for those who have failed in any subject to make it up, and it also provides a way for those who are irregular, because of having taken a part of their course in some other Law School or for any other reason, to make up back work. Students in the Night School are required to take certain subjects during the summer which are not taught at night during the regular school year.

The Summer School lasts about nine weeks, and is conducted by the regular teachers.

The Summer Session of the current year begins June 11, 1917. The following subjects will be taught, reciting five days per week.

The first and second series of the Night School will be taught at the same time. If the demand is large enough, other subjects will be offered during the summer.

#### DAY SCHOOL

**Freshman:** Elementary Law (\$12.00), 5:15 p. m.

**Junior:** Private Corporations (\$10.00), 5:15 p. m. Wills (if desired), (\$10.00), 5:15 p. m.

**Senior:** Real Property (\$10.00), 5:15 p. m.

#### NIGHT SCHOOL

**First Series:** Domestic Relations (\$6.00), 7:00 p.m., followed by Patents (\$6.00), 7:00 p.m., followed by Statutory Interpretation (\$6.00), 7:00 p.m., followed by Insurance (\$6.00), 7:00 p.m.

**Second Series:** Damages (\$6.00), 7:00 p.m., followed by Federal Jurisdiction and Procedure (\$6.00), 7:00 p.m., followed by Conveyancing (\$6.00), 7:00 p.m., followed by Securities (\$6.00), 7:00 p.m.

#### THE PRACTICE COURT

Members of the second and third year classes are assigned not less than two cases during each semester, which they are required to conduct through the Superior Court, and two of which must be taken upon appeal through the Appel-



late or Supreme Courts. Controversies are arranged and assigned upon statements of facts for trial.

All of the steps incident to a contested trial are taken, including preparation of pleadings, argument or motions, and demurrers; preparation of briefs, including trial brief of law and facts; taking of depositions; impaneling of jury; challenges; introductions of evidence; argument of cases; etc.

Students of the first and second years act as witnesses clients, and jurors. These trials are presided over by a member of the faculty, and are conducted as nearly as possible in the same manner as trials in actual courts. Each student in the first and second years must write at least three briefs, which are examined and graded by the Judge of the Practice Court.

The Practice Courts consist of the Justice's Court, the Superior Court, the Court of Appeal, and the Supreme Court. The procedure conforms to that of the State of California, with pleadings under the code. Sessions of the Courts are held weekly. A student acts as clerk of the Practice Court, and is at the Law School throughout the day. Tuesday evening of each week is set apart for Practice Court. On each Tuesday evening twelve departments are in session.

## ARGUMENTATION AND DEBATING

A course in Argumentation and Debating, Public Speaking and the Technique of Speech, in both class and individual instruction, is offered by Miss Beulah Wright, Dean of the College of Oratory, University of Southern California.

The course in **Argumentation and Debating** is designed to meet the needs of the students of the Department of Law. The work is of the most practical character.

“These, then, are the problems we have to consider—the use of the universal laws of reasoning, the development of the habit of analysis and of unprejudiced methods of investigation, the secret of clear and rapid expression of intellectual processes, and the art of adapting one's material to his hearers so as to win their favor and affect their conduct.”

In **Public Speaking**, most of the work is of an extemporaneous nature, such as short talks on current public questions, speech analysis, as well as enlargement of vocabulary, and the correction of mannerisms, and wrong habits of speech. Attention is also given to the study and delivery of great orations, and to the preparation of original orations.

Students doing work in these classes may receive credit in the College of Oratory to apply upon either of the regular courses.

### INTER-COLLEGIATE DEBATE

Inter-collegiate debating is considered apt training for actual practice at the Bar. Preparation for inter-collegiate debate proceeds upon lines similar to those followed in training for inter-collegiate athletic contests.

The "Final Squad" is selected by means of a Try-Out Debate, held in the early part of January of each year, and the coach selects the intercollegiate teams from the "Final Squad."

Students desiring to enter the Try-Outs are required to attend a squad class for preliminary training, or to show college training equivalent thereto, and satisfactory to the Oratorical Committee. The preliminary squad class continues throughout the first semester, and is open to all students free of charge. Students desiring to enter the Try-Outs, who do not enter the preliminary squad class must file a written application with the Oratorical Committee, together with a statement of previous debating experience.

First year men are eligible to inter-collegiate debate, but debates are arranged each year between smaller colleges and first year men.

The subject for the try-out debates for the year 1916-1917 was: "Resolved, that the course pursued by President Wilson, in his dealings with Huerta, was for the best interests of the United States." There were 105 contestants. Fifteen debates were arranged for the year. One debate between Polytechnic Junior College and a Freshman team of the College of Law was held December 8th, 1916; and a simultaneous debate was held between Fullerton Junior College and two Freshmen teams of the College of Law on January 31st, 1917. The College of Law held several "minor" debates, using inexperienced debaters, most of whom were Freshmen, against **the following Varsity teams**: Occidental College, December 14th, 1916; Whittier College, January 11th, 1917; Redlands University, March 1st, 1917, the last three being simultaneous contests. The College of Law met the following schools in "major" debate: The University of New Mexico, February 15th, 1917; The University of Arizona, March 5th, 1917; The University of Montana, April 6th, 1917; The University of Wisconsin, April 18th, 1917. The College of Law takes particular pride in its women debaters. Three women's debates

were held in the year 1916-1917, for women. A simultaneous debate with The Los Angeles Normal School, on November 24th, 1916, and a "major" for women, with Occidental College, on March 9th, 1917. It should also be mentioned that a Freshman woman debater supplied the place of a Freshman debater, who was unable to speak in the Fullerton Junior College debate. The College of Law offers the same forensic opportunities to women that it offers to men. Debating teams traveled to Missoula, Montana, and to Tucson, Arizona, while the University of Wisconsin sent a team of three men from Madison, Wisconsin, to Los Angeles, California.

Men, who participate in intercollegiate debates are eligible to receive the honorary Tau Kappa Alpha degree, while women debaters are eligible to receive the Tau Kappa Alpha auxiliary degree of Theta Kappa Alpha.

## STUDENT ASSOCIATIONS

### The Debating Clubs

The first year Debating Classes are under the supervision of the College, and attendance at ninety per cent of the meetings is compulsory on all regular students of the Freshmen Class. The Dean of the College of Oratory directs the work.

The Lyceum is a debating club having a restricted membership, and is composed of members of the second and third year classes.

### The Oratorical Association

The Law School Oratorical Association is organized for the purpose of stimulating interest in oratory.

Occidental College, Pomona College, Whittier College and the University of Southern California compose an Oratorical Association. Students of the Law Department are eligible as representatives of the University in the contests.

A cash prize of \$75 is awarded the winner of the local try-out; \$15 is awarded the contestant taking second place; and \$10 is given the one taking third place.

A contest is also held between representatives of the same Colleges, called the Peace Oratorical Contest. A cash prize of \$100 is awarded the winner of the inter-collegiate event.

### Fraternities and Sororities

The five national legal fraternities, Phi Delta Phi, Delta Chi, Phi Alpha Delta, Delta Theta Phi and Sigma Nu Phi have chapters here.

A chapter of the national honorary forensic Fraternity, Tau Kappa Alpha, is also maintained.

The Phi Delta Delta Legal Sorority, Alpha Chapter, was organized here in November, 1911. Since that time other Charters have been granted, making it a national organization.

No additional Fraternities or Sororities may be organized without permission from the Board of Control.

### THE ALUMNI MEDAL

This prize is an unusually elaborate gold medal, which is presented each year at Commencement to that member of the graduating class who shall have maintained the highest general average in scholarship throughout the whole College course. This medal was awarded in 1916 to Harold C. Morton.

### ATHLETICS

Regular students of the College of Law take part in all intercollegiate athletic events. The Law School has separate baseball and tennis teams, and during the past year ranked with the best representatives of the other colleges of Southern California.

### FEES AND EXPENSES

Entrance fee (required upon registration).....	\$10.00
Day Session (nine hours or over), per semester.....	45.00
(For less than nine hours a reduction is made.)	
Night Session—	
Freshman year (seven hours or over), per semester	25.00
Other years (seven hours or over), per semester....	30.00
(For less than seven hours a reduction is made.)	
Postgraduate course .....	90.00
Diploma fee .....	10.00
Annual student-body assessment (payable on registra-	
tion) .....	5.00
Special examinations, each.....	5.00
Change in schedule more than week after semester	
begins .....	1.00
Failure to pay fees when due debars from the classroom.	
No refund is made except in case of sickness, and none is	
made after the middle of a semester.	

The prospective student should expect in incidentals, such as athletic meets, debates, oratorical contests, etc., attendance upon some of which may be required, a sum not to exceed \$5.00.

Fees for Class Work, Public Speaking, per semester (2 periods per week).....\$10.00

Fees for Private instruction charged according to length of period.

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

Students on arriving at Los Angeles may obtain information in regard to rooms and board by calling at the office of the Law School, 416 Tajo Building.

Although the school cannot agree to secure students positions in offices, yet it will assist those who desire to make such arrangements, and it may be here stated that ordinarily no serious difficulty is experienced in finding such opportunities.

Address all communications to

FRANK M. PORTER,  
College of Law, University of Southern California,  
Tajo Building, First and Broadway,  
Los Angeles.



# THE COLLEGE OF DENTISTRY

In compliance with the resolutions adopted by the American Institute of Dental Teachers at the meeting at Ann Arbor, Michigan, January 26th, 1915, to the effect that "all colleges holding membership in this organization shall as far as possible announce in their catalogues a period of registration (matriculation) prior to the date of opening of the formal course of instruction, and that the registration shall close on the first day of the course of instruction; and further, that those cases of students presenting themselves after the close of said period of registration be reviewed by the whole faculty and proper recommendations made in the premises, for the approval of the State Board of Dental Examiners," this College will register (matriculate) the Junior and Senior students at any time after the issuance to them of a certificate of promotion up to the day set for the opening of the regular course of lectures. The matriculation book will be open for Freshman students from the day following commencement day up to the day of the opening of the regular session. *It therefore follows that Freshman students may matriculate for the session 1917-'18 at any time between June 9th and September 27th, Junior and Senior students at any time between the receipt by them of the certificate of promotion and the opening of the regular session on September 27th. In the case of students having been prevented from matriculating within the limits of time herein specified, their cases will be reviewed by the faculty and if found that they are able to successfully make up the amount of work covered prior to their admission as students, they will be entered in the matriculation book as regular students. All students should be in attendance at the opening of the session.*

## GENERAL STATEMENT

The College of Dentistry of the University of Southern California was organized and formally opened for students eighteen years ago. It is under the control of a Board of Trustees and is incorporated strictly as an educational institution in which stock, dividends or profit play no part whatsoever. The income from all sources is expended for instruction and new equipment, educational results being the goal of the institution.

The Board of Trustees is composed of members of the Faculty of the College of Dentistry, representatives of the

Southern California Dental Association, the Los Angeles County Dental Society, the Alumni of the College, and the Trustees of the University of Southern California.

As a member of the National Association of Dental Faculties, and the Institute of Dental Teachers, the College of Dentistry has ever co-operated with these bodies with the end in view of upholding the ideals of a profession devoted to the betterment of mankind.

The diploma of this College is recognized by all State Boards of Dental Examiners, subject only to such restrictions as govern all dental diplomas in the State in which application to practice is made.

The school requires for graduation, in addition to the necessary preliminary educational requirements, three years of thirty-two weeks each to complete the course which has been adapted to thoroughly prepare students for the practice of dentistry. The technical work is largely performed in the first two years, but a part of the second and all of the third year are given over almost exclusively, outside of the lecture hours, to performing operations in the operatory, which is open every day from nine a. m. until five p. m. This gives an unusual opportunity for the development of skill in general operative procedures, and clinical material is so abundant that each student can become familiar with all the various diseases of the teeth and of the oral cavity and their treatment.

The College of Dentistry is accessible by several street car lines, and is only a short distance from the business center. In selecting the location for the new building in which the college is now housed, environmental quietness and attractiveness were borne in mind, assuming and it is believed correctly so, that these factors play an important part in the successful dissemination of knowledge.

### **Places of Association and Recreation**

The students in this College, as in other dental institutions throughout the country, come from various walks of life. By this we mean environmental influences; therefore, each seeks for himself a continuation or renewal of those environments which have shaped his habits and moulded his methods of life, as it were. This city affords, in abundance, opportunities for individual gratification. Churches of all creeds and denominations are here in plenty; the Y. M. C. A. has a membership of over 5000 and extends a cordial welcome to young men who seek the refining influences of this splendid association.

The Y. W. C. A., working along the same lines, is ever ready and anxious to serve the young women. Then, on the other hand, we have clubs, social and political; lodges and societies of all kinds; high-class theatres and places of amusement, and in fact, all things that serve to relieve the student mind, at times, from the strain and grind of college work, all of which are necessary and right, when properly indulged in.

Eastern students can come here and gain an education at no greater expense than if they remained at home, and at the same time enjoy all of the advantages of the surroundings. The rapid growth in population of this section opens many opportunities for dental practice, thus enabling our graduates to advantageously locate themselves where their school is best known, and where their acquaintance and following have already been established.

### **THE BUILDING**

The new College Building was ready for occupancy at the beginning of the session 1914-1915. It represents the concerted efforts of men who, for many years, have devoted themselves to the cause of dental education, and who, in consequence, are thoroughly familiar with the material requisites that should be possessed by a structure under whose roof every branch of dentistry is to be taught. Planned and erected exclusively as an educational home of dentistry, it embraces within its walls such modern facilities, appliances and teaching accessories as it is believed are indispensable for the successful inculcation of the principles underlying the practice of dentistry and dental surgery. The building, classic in its simplicity, is composed of three stories, mezzanine and basement. The basement contains a system of lockers, men's retiring room, shower baths, cafeteria and the heating plant. The ground floor contains Reception room for patients, Examination room, the Business office, the X-ray Laboratory, Casting room, Ladies' retiring room, the Senior Laboratory, the Junior Technique Laboratory and the Operatory.

The second floor contains the Library, the Laboratories of Histology and Pathology, Preparation Room, Lecture Room No. 4, Laboratory of Bacteriology, Dental Surgery, Freshman Laboratory, Men's retiring room, a system of lockers, etc.

The third floor contains Lecture Rooms Nos. 1 and 2, the Laboratory of Chemistry, the Laboratory of Anatomy, the Research Room, Teachers' Study, and Lecture Room No. 3.

### **Operatory**

In planning this very important unit of the building such features as proper lighting and ventilation were given the most thoughtful consideration. It is provided with seventy modern dental chairs, each chair being supplemented by fountain cuspidor, a revolving bracket, gas and electric connection and surgical instrument table. Two large sterilizers of special design enable the students to sterilize their instruments and appliances after each operation in individual compartments. The Operatory is in charge of a superintendent, all operations being performed under his supervision, or that of his several assistants. The dispensary department of the Operatory supplies all materials needed for the operations in the field of operative or prosthetic dentistry, upon presentation of orders checked and signed by any one of the demonstrators in charge. A free towel service and a liberal supply of individual aseptic drinking cups makes it possible to impress upon the student the necessity of carrying out all operations under scrupulously clean surroundings. The Operatory faces the best light under which dental operations should be performed, namely north and east. It is surrounded by broad, high windows which make it possible to obtain all available light at all times of the day. Instruments are stored in a system of lockers adjoining the operative clinic. The room is large and beautiful, and is equipped with every modern convenience. The number of patients who apply here for services is truly phenomenal, and no student need fear that his practical education will be neglected. From this great clinic it is possible to select for the student all of the operations in any line in which he may desire to specialize, or where he feels that he needs additional experience and practice. No student is permitted to operate unless robed in a white gown of the type prescribed by the institution.

The lecture schedule is arranged in such a manner that the students can work with little interruption from nine in the morning until five in the afternoon.

In charge of the work as professors and demonstrators we have a number of teachers of long experience and unquestioned ability. The student has the advantage of the personal contact and instruction of these competent men.

With the exception of legal holidays, the Operatory is open the year round. There is no extra charge for the Summer Clinical Course. While not a requirement, it is advised that the student spend as much time of the vacation period as he possibly can in the actual practice of dentistry



in the Operatory. This course is very advantageous to the student, as it enables him to put in four solid months of practical work without any interruption from attending lectures.

### **Senior Laboratory**

This laboratory is equipped with the appliances and facilities necessary in order to perform operations in the field of prosthetic dentistry with completeness and ease. Each student is assigned to a prosthetic bench unit in which all prosthetic instruments are kept and at which unit the clinical prosthetic substitutes are constructed. The room is provided with electric lathes, compressed air, soldering table and every other facility which should be included in a modernly equipped dental laboratory.

### **Junior Technique Laboratory**

The Junior Laboratory adjoins the Senior Laboratory and is equipped with the same facilities as enumerated in the case of the Senior Laboratory. The progressive teaching of prosthetic dentistry renders it advisable that the laboratories in which the requirements of the Seniors and Juniors are made should be separate, for the purpose of securing the maximum of efficiency from both student and instructor.

### **Freshman Technique Laboratory**

The Freshman Laboratory is located on the second floor and here the dental novice is trained in the fundamentals of prosthetic dentistry as well as in such operations as fall within the scope of operative technics. The unit system of benches has been carried out in this laboratory, as in the others, thus permitting each student to fulfil the requirements in these departments in an environment which at once impresses him with the advantages to be derived from performing on a systematic basis the several steps of an operation. During the hours which the student is required to devote to laboratory work, the chiefs of these laboratories, as well as their assistants, are invariably at hand to supervise the efforts of the student to duplicate the prosthetic appliances or operative technique manipulations as demonstrated by the head of the department or his assistants. It is believed that the best teaching results are obtained by giving to the student the benefit of direct advice from his teachers, and with this end in view the personnel of this department comprises a sufficiently large number of instructors so that the student is at no time thrown at the mercy of his own resources.



### **X-Ray Laboratory**

The X-Ray Laboratory, which adjoins the operative clinic, plays an important part in the diagnosis of obscure conditions in the teeth and jaws. Realizing that radiography is of utmost assistance in the diagnosis of pathological conditions, the student is trained not only in the X-Ray technique, but likewise in that phase of the work of the utmost importance, viz: the interpretation of radiographs. Whenever possible, the diagnosis of pathological cases is supplemented by radiographic plates, thus giving to the student the advantage of rational methods of diagnosis.

### **Laboratory of Pathology and Histology**

The Laboratory of Pathology and Histology is provided with sufficient microscopes to enable each student to study the characteristics of normal and abnormal tissues without interference from his classmates. An important educational accessory of this department is a collection of carefully mounted histological specimens of the human tissues and those of the higher vertebrates. These sections, to the number of nine thousand, are kept in a cabinet constructed for the purpose and are so filed as to render the finding of a section an easy task. Adjoining the laboratory the technique room is equipped with the appliances and materials required for the preparation of sections, and of such drawings as are made use of in the effort to bring out diagrammatically the conditions observed with the aid of the microscope. The laboratory is equipped with Bausch and Lomb microscopes, projectoscopes and other necessary apparatus.

### **Laboratory of Physiology**

This laboratory is equipped with a sufficient number of such instruments as are made use of in physiological laboratories for the purpose of conveying in a palpable way to the student, the significance of the didactic work by the head of this department and his assistants.

### **Research Room**

This room is equipped with the instruments and paraphernalia required in pathological, bacteriological and photomicrographic work. The diagnosis of diseases of the pulp and peridental membrane and of the oral mucous membrane, tongue and salivary glands is an important phase of the work of this laboratory. The diagnosis of dental and oral disorders without the assistance of the laboratory is in a

large number of instances of doubtful value. This laboratory fulfills a mission in the domain of scientific dentistry and broadens the possibilities of special pathology in its bearing upon the etiology of systemic disorders.

### **Laboratory of Materia Medica**

The Laboratory of Materia Medica is equipped with all crude drugs and preparations thereof which are employed in the treatment of diseases of the mouth and teeth, and for the preparation of dentifrices. Here the student is made to familiarize himself with the physical, chemical and physiological properties of the medicinal agents used in dentistry, as well as with the methods of dispensing them. It is the aim of this department to enable the student after graduation to employ intelligently every drug indicated in dental therapeutics without having to depend upon ready made proprietary preparations.

### **Laboratory of Anatomy**

The Anatomic Laboratories are located in the third floor and are composed of two halls in which good lighting and ample ventilation are salient features. Dissecting material is plentiful and the Freshmen and Junior students are herein taught anatomy in a practical way and by methods conducive to the maximum degree of efficiency.

### **Extracting and Minor Surgery Room**

All extractions and such operations as fall within the scope of dental surgery are performed in an operating room so fitted as to fulfil every requirement of the aseptic conception of surgery. Instrument and dressing sterilizers, instrument cabinets, electric engines and all other instrumental facilities for the performance of operations in the field of minor surgery are contained in this unit of the building. The surgical room is in charge of instructors and while the more difficult operations are performed by them, the student is continuously encouraged to undertake individually, under proper supervision, such operations as frequently confront the practitioner, and which by virtue of his lack of collegiate training along this line, he is frequently compelled to refer to a specialist in these branches.

### **THE LIBRARY**

**JULIO ENDELMAN**, Librarian

It is the aim of the Faculty to encourage students to acquire, in addition to the scholastic requirements of the

dental curriculum, such information, in amount and kind, as is conducive to a broadening of his intellectual horizon. Specialists only too often, because of the necessity of concentrating upon a branch of human endeavor, well defined and palpably limited, are prone to overlook the significance of investigations in adjacent territories or to minimize their bearing upon the etiology, pathology and treatment of diseases under their immediate supervision. The dental practitioner who has been actively engaged for a period of years in the work of his specialty and who by virtue of indifference or disinclination has not kept himself in touch with the literature of his profession, is, doubtless, realizing at the present time, to his heartfelt regret, the number of precious hours that might have been profitably devoted to direct or collateral reading. This deplorable condition of affairs is traceable, to some extent at least, to the absence of that most valuable of all habits—the study habit. The Faculty encourages the development of the study habit by placing at the disposal of the student an attractively and comfortably furnished library in which all the modern text-books and reference works bearing directly or indirectly upon dentistry are gathered, as well as the leading dental and medical periodicals. By virtue of a special fund created for the purpose the latest editions of practically all modern works on dentistry and the allied sciences have been added to the library and the files of dental journals have been considerably enlarged by the addition of about one hundred bound volumes. The Librarian assists the student by guiding him along channels of profitable reading and by locating the information, in books or periodicals, frequently so difficult to find by the mind unfamiliar with the literature of his vocation.

## MUSEUM

I. D. NOKES, Curator

For several years past, specimens of pathologic conditions as well as of congenital malformations of the teeth and jaws of the higher and lower vertebrates have been made the subject of contributions by alumni and friends of the institution. In addition, from the operative, surgical and extracting clinics, excellent museum material is being constantly obtained. These specimens,—properly described, classified and mounted,—constitute one of the sources of teaching material for several departments of the curriculum. A section of the museum is devoted to collections of ancient instruments and devices and another to ancient books, pamphlets and other forms of professional literature.

**SPECIAL NOTICE**  
**Four-Years' Course**

Beginning with the session 1917-1918, in order to provide sufficient time in which to teach the subjects of a curriculum which under the three-year time limit of instruction appears over-crowded, this institution will extend its course of instruction to four scholastic years of thirty-two weeks each. The adoption of the four years' course is the expression of the conviction that more time is needed in which to cover the group of subjects at present taught. The four years' course will take care of the dental curriculum so as to enable the graduate to leave the school in fair shape to cope with the problems of that dentistry which is representative of the latest investigations in the fields of prevention, etiology and treatment of dental disease, and in that of the relationship of dental disease to systemic disturbances.

**SCHEDULE OF STUDIES****Freshman Year**

Osteology: Anatomy, including dissections; Histology, Drawing, Laboratory Work, etc.; Physiology, with laboratory work; Inorganic Chemistry, including laboratory work; Operative, Prosthetic and Crown and Bridge Technique; Dental Anatomy; Elementary Materia Medica.

Examinations held at the end of the year are final in Dental Histology, Dental Anatomy and General Histology.

**Junior Year**

Osteology of the head; Anatomy including dissections; Physiology, including laboratory work; Organic and Physiological Chemistry; Metallurgy with laboratory work; General Pathology; Orthodontia, Didactic and Technic; General and Dental Materia Medica; Children's Teeth, Operative, Prosthetic, and Crown and Bridge Technic; Porcelain, Didactic and Technic; Comparative Anatomy; Prosthetic Dentistry; Operative Dentistry; Bacteriology and Elementary Dental Pathology.

Examinations held at the close of the first semester, February 1st, are final in Operative, Prosthetic and Crown and Bridge Technic. Examinations held at the end of the year are final in Anatomy, Physiology, Chemistry, Metallurgy, General Pathology, Elementary Special Pathology, General and Dental Materia Medica; Bacteriology and Comparative Anatomy.



### Senior Year

Dental Pathology and Therapeutics; Dental Materia Medica; Surgery, general and oral, and extracting; Anesthesia; Orthodontia; Prosthetic Dentistry; Operative Dentistry; Dental Jurisprudence; Dental Porcelain, with Technic work; Radiography; Bacteriology; Children's Teeth; Ethics and Hygiene.

### Text-books

Students are advised to defer purchasing text-books until they meet the various professors and instructors in the classroom and are instructed definitely as to the books required in the different departments.

## CONDITIONS OF ADMISSION

### Code of Rules of the National Association of Dental Faculties

#### Rule 1. Regulating Admission of Students—Preliminary Examination.

"Each student seeking admission to any college of this Association shall have completed an accredited four years' high school course, or shall successfully pass an examination the equivalent of such high school course.

"This examination and verification of all certificates shall be conducted by a state superintendent of public instruction or his appointee.

"Sufficient knowledge of the English language for the easy comprehension of lectures and didactic instruction shall in every instance be demanded of foreign students in American dental schools.

"In event of a student not having completed his full high school course, or of his having done special work in high school, college or academy, or in event of an applicant not being able to furnish satisfactory evidence of having completed a course of study necessary to acquire the required number of points, he may be examined by the Examiner appointed by the Superintendent of Public Instruction of the state of California whose certificate will be accepted by the College." This Examiner is a resident of this city, and this examination may be taken at any time previous to the student's matriculation. Examinations bearing upon the applicant's preliminary qualifications will in no event be conducted by any person or persons connected with this Faculty or with this institution, but must be conducted by an Examiner appointed by the Superintendent of Public Instruction of the State of California.



Prospective students should submit their credentials to Professor J. H. Montgomery, Registrar of the University, at the College of Liberal Arts, Thirty-fifth street and University avenue. If these credentials are found to be satisfactory, a Certificate of Admission will be issued which must then be presented to the Dean in order to secure enrollment in classes.

### **Admission to Advanced Grades on Certificates**

This College will receive into the Junior and Senior years, only such students as hold certificates of having passed examinations in the studies of the Freshman or Junior years respectively, in a school which demands the same or higher preliminary educational requirements, and maintains the same curriculum; except a student presenting satisfactory evidence of graduation from a reputable medical college, who may then be received into the Junior year, provided he make up such subjects taught in the Freshman year as he has not previously studied.

All students who have successfully passed their examinations for advanced standing and have complied with all the rules of the College of Dentistry shall have their certificates given or mailed to them within thirty days after such examinations shall have been completed, such certificates to be pledges to any college to which the holders may apply, that the requisite number of terms have been spent in the College of Dentistry, University of Southern California.

### **Special Students**

Special students may be admitted on such entrance requirements as the Faculty may determine.

They will be required to attend courses they desire to pursue with the same regularity as the regular students and will pay the regular tuition fee; no diploma or certificate shall be issued at the close of such special study.

Applicants desiring to register as special students will be required to indicate what subjects they desire to pursue, and to present satisfactory credentials for matriculation in said subjects.

Candidates for admission will not be permitted to matriculate for any session other than that immediately succeeding the date of matriculation.

This College reserves the right to refuse admission to any student or to terminate the attendance of any student, at any time for what may appear to the Faculty to be good and

sufficient cause, as inefficiency, conduct unbecoming a gentleman or conduct not conducive to the morals of the class or institution; also, to refuse a student the privilege of any special or final examination, for causes as above stated.

## **REQUIREMENTS FOR GRADUATION**

The candidate for the degree of Doctor of Dental Surgery must have attained the age of twenty-one years, and must be of good moral character.

He shall have attended three full courses of lectures, of thirty-two weeks of six days each, exclusive of vacations, at some recognized and accredited dental school, the last course of which shall have been attended at this school, provided he matriculated as a dental student at a school session prior to that of 1917-1918. Beginning with the session of 1917-1918 he shall have attended four full courses of lectures, of thirty-two weeks of six days each, exclusive of vacations.

He must complete all technic work prescribed throughout the course, perform all operations, treat all cases, insert the required number of artificial dentures, crowns and pieces of bridgework required by the respective professors. All this must be done in the College building, and exclusively by the applicant for the degree. He must have conformed to all the rules of the college and paid all fees. He must pass a satisfactory examination, oral, written, and practical, and if found necessary, must submit to any additional test that may assist an instructor in obtaining a correct measure of the candidate's fitness to engage in the practice of dentistry. When these requirements have been complied with, he will be recommended by the Faculty of the College of Dentistry to the President of the University of Southern California for the degree of Doctor of Dental Surgery.

The degree will not be conferred upon a student who is not present in person at the commencement exercises, unless excused by the Dean.

### **Rules Governing Examinations and Standing of Students**

The grades will be upon the scale of 100; the passing mark will be 75; attendance upon infirmary clinics, 80 per cent; lecture courses and laboratories, 80 per cent.

### **Five Medals Are Competed For**

1. The Los Angeles County Dental Society Medal is awarded the Senior who has made the best average on theoretical work during the three years' College course.

2. The Cave Medal is awarded to the student making the best piece of Prosthetic Technic work.

3. The Ford Medal is awarded to the student making the best piece of Porcelain Technic work.

4. The Atwater Medal is awarded to the student making the best piece of Operative Technic work.

5. The La Touche Medal is awarded to the Freshman student who attains the highest average in Clinical Operative Dentistry throughout the year.

### **The A. Halden Jones Chemical Prize**

(At Least Six Students Must Compete)

A prize of \$25.00 is offered to the student presenting the best thesis on his choice of certain selected subjects in Chemistry and Metallurgy. These subjects will be announced in the catalogue each year. The thesis must embody the results of some original work on the part of the student. **Every** assistance will be given those competing for this prize. The resources of the chemical department will be placed at their disposal.

The subjects for year 1916-1917 are the following:

I. Difference in behavior between hydrogen ions and other ions in the production of pain in sensitive cavities.

II. The advantages of embodying the oxides of certain metals with zinc oxid in zinc oxyphosphate cement.

III. Possibilities of organic dental cements especially of the casein-formaldehyde type and the camphor-nitro-cellulose type.

## **THE CURRICULUM**

### **DEPARTMENT OF OPERATIVE DENTISTRY**

**A. C. LA TOUCHE**, Professor

**E. C. UNDERHILL**, Demonstrator

**A. W. LUFKIN**, Demonstrator

**G. FLOYD JACKMAN**, Demonstrator

**WARREN D. GILL**, Demonstrator

The instruction in this department is given in the Junior and Senior years and embraces didactic and clinical teachings. The system of instruction is so arranged that the student after entering into the work of the Senior year is already technically able to carry out under qualified supervision ad-

vanced operations in the realm of operative dentistry. The student is trained in all the advanced methods of operative restorations which after years of trial and experimentation have proven to be the most dependable and efficient. Lectures are delivered to the Seniors and Juniors throughout the year by the head of the department and are supplemented by clinical demonstrations. The value of practical demonstrations carrying out the teachings of the chair is strongly emphasized in this department of the curriculum and constitutes the means of conveying to the student's mind the actual and detailed significance of the didactic teachings. The student after having completed the operative technical requirements of the Junior and Freshman years is at the beginning of the second semester permitted to undertake clinical work in the Operatory, provided that throughout the period of technical preparation he has displayed that degree of diligence and perseverance and obtained such results as in the judgment of his instructors constitute a justifiable warrant for advancement. The histological survey of tissues of the tooth, from the standpoint of operative dentistry, is given a degree of prominence in harmony with the role which the subject plays in the preparation of cavities, upon a foundation which takes into consideration the restorative and prophylactic objects of operative procedures, particular stress being laid by the chair on the restoration of normal tooth contour—the imperative requisite in the maintenance of correct relationship in the interproximal space. The course is graded as follows:

Dental histology with reference to operative dentistry—the treatment of the enamel, dentine and cementum. Examination of the teeth and soft tissues of the mouth. Instruments and appliances. Methods of excluding moisture. The principles and technique of cavity preparation for the various filling materials. Detailed study of the physical characteristics of filling materials. The operation of filling cavities with gold foil. The operation of filling cavities with gold inlays. Porcelain inlays. The plastics—amalgam, synthetic porcelain, cement, and gutta-percha. The technique of pulp-capping. The management of patients. The technique of filling root canals. Bleaching of teeth. Management of children's teeth.

Hours—Lecture work.....	96 hrs.
Clinical Demonstrations .....	64 hrs.

Books—Operative Dentistry, Black, Vols. I and II,  
and American Text-Book of Operative Dentistry, Kirk.



**DEPARTMENT OF OPERATIVE TECHNICS**

A. C. LA TOUCHE, Professor  
 J. T. PARKER, JR., Demonstrator  
 E. C. UNDERHILL, Demonstrator.  
 S. S. McMILLEN, Demonstrator  
 G. FLOYD JACKMAN, Demonstrator  
 V. H. BROWN, Demonstrator  
 W. D. GILL, Demonstrator

It is the aim to make this department one of the strongest in the College. The object of this course is to afford a thorough technical training in operative procedures, preparatory to practical work in the Operatory; to develop manipulative skill and to give the students an intimate knowledge of the tissues upon which they are to operate and of the physical qualities and adaptation of the materials to be used, and to secure facility in the use of instruments by systematized practice upon extracted human teeth.

Special attention will be given to the study of pulp chambers and root canals, their number, size and form, and their relation to the outer surfaces of the teeth. Sections of the natural teeth will be prepared by each student in such a manner that these features will be clearly shown.

The student will construct model tooth forms of natural teeth, upon which operations will be performed as in actual practice. This will consist in the preparation of cavities and a study of their classification and forms; the study of enamel and the direction of cleavage on different parts of the crowns of the several teeth with special reference to the best form and finish of margins of cavities for filling; the cutting of dentine and the various methods employed in anchoring fillings; the removal of various tissue; the management of pits and fissures; and the general shaping of the cavity. Instruction will also be given in the application of the rubber dam, the methods employed in gaining space, the use of clamps, wedges, separators, etc. In conjunction with practice in cavity preparation, there will be a study of filling materials and their manipulation. This course is designed to ground the student thoroughly in the principles of filling operations, and to prepare him to prosecute intelligently the practical work of the Operatory.

Hours—Freshman Technics .....	320 hrs.
Lecture work.....	64 hrs.
Junior Technics .....	72 hrs.
Lecture work.....	24 hrs.

Books—Operative Dentistry, Black, Vol. II.



**DEPARTMENT OF PROSTHETIC DENTISTRY**

C. J. R. ENGSTROM, Professor  
E. LESLIE EAMES, Demonstrator  
FRANK G. STALEY, Demonstrator  
T. L. MILLHAM, Demonstrator  
W. D. GILL, Demonstrator

Realizing that there is no branch of dentistry in which students are ordinarily so deficient as in the prosthetic department, we have aimed to develop a practical working course to the end that our graduates may be able to do this class of work in a practical and artistic manner.

From an artistic standpoint we teach the higher possibilities of the art of restoring the features of the face, together with the staining and grinding of the teeth to meet the conditions of the individual type of the patient.

The fundamental principles of atmospheric pressure, leverage, etc., are dwelt upon, enabling the student intelligently to meet the conditions presented in difficult cases. Both technical and practical dentures of all kinds are made, such as vulcanite, celluloid, aluminum, Watts metal, weighting rubber, gold and porcelain continuous-gum. Both practical and technic interdental splints are made for fracture cases, as well as obturators and velums for cleft palate cases. Moreover, as a dentist may be called upon to restore loss of tissue adjacent to the oral cavity, the course includes the making of celluloid ears and noses.

The latest discoveries in the field of prosthesis affecting the construction of full and partial dentures are brought to the attention of the student in order to guide him along channels of rationalism in prosthesis. Methods of impression-taking with modeling composition, the articulation of teeth on an anatomic and physiological basis, the selection of teeth from the standpoint of masticatory and artistic efficiency, the construction of removable partial dentures and bridges are prominent divisions in this department of instruction. The course is graded as follows:

Impressions of the Mouth, Old and New Methods. Study of the Physical Characteristics of Impression Materials. Plaster Casts. Metal dies and counter-dies. Occlusion. Articulation. Full Upper and Lower Dentures. Partial upper and lower dentures. Plate Attachments. The Gysi Articulator. Principles underlying the vulcanizing of rubber. Selection of Artificial Teeth. Metal Dentures. Pathologic conditions resulting from the wearing of defective crowns, bridges, vulcanite and metal dentures. Facial prosthesis.

Hours—Freshman Technics.....	384 hrs.
Lecture work.....	96 hrs.
Junior Technics.....	192 hrs.
Lecture work.....	64 hrs.
Senior lecture work.....	64 hrs.

Books—American Text-Book of Prosthetic Dentistry,  
Turner. Dental Prosthetics, Wilson.

## DEPARTMENT OF CROWN AND BRIDGE WORK

F. W. FRAHM, Professor  
T. L. MILLHAM, Demonstrator  
FRANK G. STALEY, Demonstrator

Crown and bridge work pertains both to operative and prosthetic dentistry, and yet it occupies such an important field that the College has deemed it wise to make it a separate department.

Students receive a complete course in Crown technique, as well as lectures, during their Freshman year. Juniors receive a complete course in bridge technique during the first semester and do practical work in the Operatory during the remainder of the year. Seniors perform practical work in the Operatory. The principles of construction of all the various forms of crowns and bridges at present in use are taught, including the conditions under which bridges should or should not be used.

Hours—Crown and Bridge, Freshman	
Technic .....	192 hrs.
Junior Technic .....	96 hrs.
Lecture work, Freshman.....	48 hrs.
Lecture work, Juniors.....	30 hrs.
Lecture work, Seniors.....	96 hrs.

Books—Crown and Bridge Work, Evans, also Goslee's and Hovestadts.

## DEPARTMENT OF CERAMIC ART

B. F. ESHELMAN,\* Professor  
H. C. KING, Demonstrator  
CLARENCE E. WORTH, Demonstrator

Porcelain is attracting more and more attention. It is the most artistic method of restoring teeth or parts of teeth. Cavities in the natural teeth can be filled with porcelain inlays,

\*Deceased.

which so accurately imitate nature as to be undetectable to the naked eye.

Students of this school will be expected to attain a high degree of proficiency in the manipulation of porcelain. The College is equipped with Townsend, Hammond, and Custer electric furnaces, and with a large oil furnace for continuous-gum work. Students are taught how to construct inlays of high-or low-fusing porcelain, and porcelain crowns and bridges, with special attention to the different blending of colors. A complete course of lectures is given covering the entire subject.

Opportunity is afforded the Seniors and Juniors for making a technical continuous gum case.

Hours—Technique and Clinical work.....64 hrs.

## DEPARTMENT OF GENERAL MATERIA MEDICA

JULIO ENDELMAN, Professor

The work for the Junior class consists in a study of definitions, the use of abbreviations and terminology, the source of drugs, preparations made from crude drugs, methods of administering medicines and agencies, classifications of drugs, their physical, chemical, and poisonous properties, dosage, antidotes, and therapeutic application. Special attention is given to those drugs that are peculiarly valuable in the practice of dentistry, and the course is so planned that the student may receive a practical knowledge of the application of dental medicine in his every-day work. Two lectures a week.

In the Senior year the work of the Junior year is carefully reviewed in a systematic way, and thereafter a special course of lectures is given relating to the latest and best approved methods in the application of medicines to the treatment of those pathological conditions of more than usual significance to the dentist. One lecture a week throughout the scholastic year.

Hours—.....64 hrs.

Books—Materia Medica, Pharmacology and Therapeutics, Buckley—also Long and Prinz.

## DEPARTMENT OF PYORRHEA ALVEOLARIS AND ORAL PROPHYLAXIS

MAXWELL M. DIXON, Demonstrator  
D. ARTHUR JOHNSTON, Demonstrator  
J. T. LOUGHAN, Demonstrator  
THOMAS LYNCH, Demonstrator

Oral prophylaxis, as well as the treatment of the group of diseases generally designated as pyorrhea alveolaris, is from the clinical standpoint, the subject of attention in a special department. Seniors and Juniors are required to devote one afternoon a week exclusively to this important phase of dental therapeutics. This department is presided over by specialists in these branches and affords the student an opportunity to familiarize himself in detail with the technique of the operations in the fields of oral prothylaxis and pyorrhea alveolaris. The course embraces the didactic and clinical consideration of the following phases of the work.

Instrumentation. Correction of conditions which act as predisposing factors of diseases of the hard and soft tissues of the tooth and of its supporting structures. Clinical consideration of the varieties of calcific deposits upon the crowns and roots of teeth. Conservation of contour and septal tissues. Diseases of the gingiva and peridental membrane of the pyorrhea type. The surgical removal of deposits. Polishing of tooth and root surfaces. Treatment of the teeth of children with the end in view of preventing the onset of dental caries. Splinting of teeth the seat of peridental disturbances.

Hours—Clinical work.....96 hrs.

## DEPARTMENT OF DENTAL ANATOMY

A. C. LA TOUCHE, Professor

J. T. PARKER, JR., Lecturer and Demonstrator

The student takes up the study of nomenclature, followed by descriptive human dental anatomy, the arrangement of the teeth, and the structure of the root canals. Drawings and the making of cross-sections of the various teeth enter into this course. Lantern slides in large numbers are used to facilitate the study of this important branch of the curriculum. This method will be of material benefit to the student, as the different surfaces of the tooth will be enlarged upon the screen.

Hours—Lecture work .....32 hrs.

Clinical work .....96 hrs.

Books—Dental Anatomy, Black—Dental Anatomy and Histology, Broomell and Fischelis.



**DEPARTMENT OF ORAL SURGERY**

CHAS. D. LOCKWOOD, Professor  
 D. D. THORNTON, Assistant Professor  
 C. F. THOLEN, Assistant Professor  
 R. E. LANE, Dental Surgeon  
 H. E. STRAUB, Dental Surgeon

This course will consist of:

1. Didactic Lectures by Prof. Lockwood.
2. Text-book quizzes by Prof. Thornton.
3. Clinics at the Los Angeles County Hospital by Prof. Lockwood, assisted by Dr. Tholen, Lane and Straub.

The course in Oral Surgery will be made as practical as possible, special attention being given to diagnosis. The Los Angeles County Hospital furnishes abundant material to demonstrate all surgical lesions of the mouth and weekly clinics are held by Prof. Lockwood, Assistant Professor Tholen and assistants from October 1 to May 1.

Hours—Lecture work .....32 hrs.

Clinical work .....96 hrs.

Books—Surgery and Diseases of Mouth and Jaws,  
 Blair—also McCurdy.

**DEPARTMENT OF ORTHODONTIA**

JAMES D. McCOY, Professor  
 JOHN R. McCOY, Assistant Professor

**Course I. Junior Year.** Lectures, illustrated by lantern slides, demonstrations and technique. The principles of Orthodontia are taught, special attention being given to normal occlusion and those factors which maintain it. The etiology of malocclusion in all its phases is thoroughly discussed, followed by the classification, diagnosis and preliminary considerations of treatment. The technique of taking impressions and making models for orthodontic purposes is demonstrated and each student is required to construct certain pieces of technique work. Hours—32.

**Course II. Senior Year.** Lectures, illustrated by lantern slides, demonstrations and clinical instruction. The work of the Junior year is very briefly reviewed and the principles of treatment continued. The various modern means employed in the correction of malocclusion of the teeth and facial deformities, are thoroughly explained and demonstrated. The procedures necessary for the prevention as well as treatment of all phases of malocclusion are covered in detail.



Clinical orthodontia will enable the student to familiarize himself in a practical way with the methods and procedures taught didactically and to acquire a working foundation in this specialized branch of dentistry.

Hours .....	32
Books—Malocclusion of the Teeth, Angle, Practical Orthodontia, Dewey.	

## DEPARTMENT OF RADIOGRAPHY AND THE X-RAY

JAMES D. McCOY, Professor  
V. H. BROWN, Demonstrator

**Course I. Junior Year.** In a series of illustrated lectures the principles of the X-ray are thoroughly explained, including its history, the means employed in its production. Modern X-ray apparatus and the rules governing its manipulation are explained. Its application to dentistry and the technique of dental and oral radiography are brought out in detail.

**Course II. Senior Year.** In the X-ray room which is equipped with all the necessary modern X-ray apparatus practical cases from the Operatory are subjected to X-ray examination. Radiographs of the teeth and associated structures are made whenever indicated. In this way the student becomes familiar with the practical as well as the theoretical side of this important subject.

Hours—Lecture work .....	10 hrs.
Practical work .....	32 hrs.

## DEPARTMENT OF COMPARATIVE DENTAL ANATOMY

I. D. NOKES, Lecturer

This course involves a comparison of the teeth of man and those of the lower orders of animal life. Evolution, with the part that variation plays in determining the character of a given organ, is studied. The students prepare specimens under the guidance of the teacher. The course is made more interesting and instructive by the large collection of specimens and the complete line of lantern slides that are used for illustrating the lectures.

The course is strengthened and enlarged by the complete equipment and facilities that the new building affords.

Hours—Lecture work .....	16 hrs.
--------------------------	---------

**DEPARTMENT OF ANESTHESIA: GENERAL AND LOCAL****JULIO ENDELMAN**, Professor**ROY L. SPENCER**, Lecturer**C. J. APABLASA**, Demonstrator**H. E. STRAUB**, Demonstrator

The wonderful development in the field of anesthesia, which has been brought about in the past three years through the efforts of investigators in the medical and dental professions, constitutes the reason for the establishment of a department exclusively devoted to the study and practice of all methods of inducing general and local insensibility to pain. Infiltration anesthesia, conductive anesthesia, intra-osseous anesthesia, nitrous oxid-oxygen anesthesia, etc., are some of the methods with which the student is made to familiarize himself, invariably under the immediate supervision of a member of the staff.

Hours—Daily clinical demonstrations.

**DEPARTMENT OF ANATOMY****W. R. MOLONY**, Professor**MELVIN ELLIS**, Associate Professor**WAYNE P. HANSON**, Associate Professor**H. L. MOFFATT**, Demonstrator

**Anatomy I.** In this course the anatomy of the bones, joints, blood vascular system, peripheral nervous system, thorax, abdomen, and their viscera are studied. Special emphasis is laid upon points of practical importance. Lectures, recitations and demonstrations twice a week during the first semester of the Freshman year.

**Anatomy II.** Dissection and demonstrations of at least one part of the cadaver. The student is shown the proper method of making careful and accurate dissections particular attention being paid to thoroughness and the relation of parts. Twice a week during the second semester of the Freshman year.

**Anatomy III.** Lectures twice a week followed by recitations upon the same. Special attention is given to the anatomy most intimately associated with the practice of dentistry. Two lectures a week followed by recitations during the first semester of the Junior year.

**Anatomy IV.** Dissection and demonstrations of the head and neck. Two lectures a week followed by recitations during the second semester of the Junior year.

Hours—Lecture .....128 hrs.

Books—Cunningham,—also Gray and Piersol.

## DEPARTMENT OF PHYSIOLOGY

J. WALTER REEVES, Professor

WALTER E. LEONARD, Assistant

The courses in Physiology are given during the first and second years. The work consists of lectures, recitations, and demonstrations; for the latter purpose a complete physiological laboratory being available.

The subject of cells, tissues, blood, and the circulatory system are first taken up, and later the course is devoted to the study of the alimentary canal, excretory organs, the nervous system, the organs of special sense, and the organs of reproduction.

Bearing in view the fact that the dentist is a specialist in the treatment of diseases in an area of the human body which plays so important a part in the maintenance of the general nutritional balance, the course is so graded as to result at the end of the Junior year in the acquirement by the student of a degree of proficiency which shall enable him thoroughly to understand the functional and nerve mechanisms of all the tissues and organs of the body. The strictest attention to the individual requirements of the student is in this, as in other departments of the curriculum, an object paramount in the efforts of the professor and assistants.

For the purpose of conducting quizzes, oral and written, the class is divided into sections, each section being under the supervision of assistants. This plan likewise applies to the practical work in the laboratory devoted to the purpose, the students performing experimental work under the direct supervision of demonstrators.

**Course I. Freshman Class.** Cells, Tissues, Circulation—Study of the circulating fluids in details. Heart and Blood Vessels—Lymphatic structures and channels. Respiration—anatomic and physiologic survey of the organic structures, nerve mechanisms and interchange of gases in respiration.

**Course II. Junior Class.** Digestion—Detailed study of the ferments and the glands associated with the alimentary

canal. Excretion—Kidneys, skin, etc. Internal Secretion—Pituitary body, thyroid, thymus, spleen and adrenal body. Nervous System—Cerebro—Spinal axis, spinal, sympathetic and cranial nerves. Special Senses—Sight, hearing, taste, etc. Reproduction, etc.

Hours .....192

Books—Kirke's Handbook of Physiology. Brubaker's Physiology. Hall's Physiology.

## DEPARTMENT OF CHEMISTRY

A. HALDEN JONES, Professor

PLACIDA GARDNER, Assistant

DONALD K. LIPPINCOTT, Special Lecturer

WILLIAM T. SMITH, Instructor in Metallurgy

F. B. FITCH, Instructor in Chemistry

### 1. General Chemistry.

- a. Lectures, demonstrations and text-books, two weekly.
- b. Laboratory work, six weekly, Oct. 1 to Jan. 1; four weekly, Jan. 1 to May 15.

The general principles of inorganic chemistry are reviewed. Those who do not have credits in high-school chemistry, or who are weak in this subject, are given special attention during first twelve weeks. Special stress is laid on physical chemistry so that the student may correctly interpret the modern ideas of matter and the properties of matter. Then the study of the elements and their compounds is taken up; first the non-metals, most of them being prepared in the laboratory. In the study of the metals the application of the principles of chemistry and metallurgy to the dental profession is continually borne in mind. Detailed consideration is given to nitrous oxid, hydrogen peroxide and the peroxides of the alkalies and alkaline earths, silica and the silicates, porcelain and glass, the acids of phosphorous, the chemistry of the powders of oxyphosphate cements and of photography.

### 2. Metallurgy.

- a. Lectures and demonstrations, two weekly.
- b. Laboratory work, six weekly, Oct. 1 to Jan. 1.

In this course only those metals are considered that are of importance to the dentist. These are studied with reference to their physical and chemical properties; their separation and refining and their identification. Alloys, amalgam alloys, solders, cements, dentifrices, etc., are prepared in the laboratory.



**3. Qualitative Analysis.**

a. Lectures and demonstrations, two weekly, Jan. 1 to April 1.

b. Laboratory work, four hours weekly.

The fundamentals of analytical methods, chemical and physical equilibrium, theories of solution and ionization. Some applications of physical and electro-chemistry to qualitative analysis. The advantages and simplicity of dry methods in certain cases are studied in detail. The student is given unknown alloys and solutions. In these he is required to determine both metal and acid radical.

**4. Electro-Analysis.**

Two lectures and two laboratory periods weekly for eight weeks.

Discussion of apparatus and methods. Separation and quantitative determination of gold, silver, copper, zinc, and cadmium. Determination of a few anions.

**5. Sanitary Water Analysis.**

A study of the impurities in drinking water, their significance, limits of permissibility and method for their determination.

**6. Fire Assay.**

At least six students must register for this course or it will not be given. Course arranged to suit needs of students applying.

**7. Mineralogy.**

Six lectures, eighteen hours laboratory.

Descriptive and determinative course. The most important ores of elements used in dentistry are studied.

**8. Toxicology.**

Twelve weeks.

The physiological and toxicological action and the antidotes for the common non-metallic poisons such as yellow phosphorous, the mineral acids and caustic alkalies, the metallic poisons, the volatile organic and alkaloidal poisons. The application of tests for these substances in body secretions and post mortem material.

**9. Food Analysis.**

Ten weeks.

Apparatus and methods. Detection of adulterants and preservatives.



**10. Organic Chemistry.**

Ultimate and proximate analysis of organic compounds in lecture and demonstration. A theoretical study of the aliphatic, carbocyclic and heterocyclic compounds and the course is finished by the student preparing several organic compounds in every day use in his profession—such as chloroform, aristol, iodoform, ethyl bromide, etc.

**11. Physiological Chemistry.**

The chemistry of the mouth and salivary digestion in detail. Also chemistry of gastric and intestinal digestion, urinalysis, chemical constituents of the body in general and their action in metabolism.

**12. Chemical Seminar.**

The teaching force of the department will meet with interested students in the evening to discuss recent literature, problems of research, etc. At this time we will hear from teachers in other universities that may be available. This should do much to stimulate interest in research.

**13. Original Investigation.**

Students wishing to do work along special lines are encouraged to do so if they have sufficient training and time from their other studies. The resources of the department are placed at their disposal. The possibility of new and better alloys, cements, better oral antiseptics, etc., is suggested.

**14. Chemical Review.**

During second semester of the Senior year there will be a resumé of the required courses of the previous years. Review lectures, demonstrations, oral and written quizzes.

Course No. 1 is required of all Freshmen.

Courses 2, 3, 7, 10, 11 are required of all students before registering for Senior year.

Course No. 4 is given by Donald K. Lippincott every second year. Students of all classes having credits for Course No. 1, or its equivalent are eligible.

**DEPARTMENT OF DENTAL PATHOLOGY**

**JULIO ENDELMAN**, Professor

**A. W. LUFKIN**, Assistant

The instruction in this branch will consist of two lectures each week to the Junior and Senior students, embracing a study of all pathological conditions of interest to the dental practitioner, together with a general application of the therapeutic agents indicated in the treatment of these conditions.

The didactic work is supplemented by clinical work, under the direct supervision of the professor and assistants. Every deviation from the normal, functional or organic, is closely observed and the student is made to familiarize himself with every phase of oral and dental pathology. He is daily confronted with problems in dental pathology which he is made to study individually, the results of his observations being submitted to those in charge of this department for final criticism. The study of disease processes and of rational curative measures being the keynote of a successful practice, to this department of the curriculum is given the undivided attention of the chair.

The following are some of the divisions of the course which are entered into at length and in detail. Frequent written tests are a feature of the work:

Anatomic conception of disease—Cellular pathology. Cause of disease, general and local (predisposing causes, exciting causes). Disorders of nutrition affecting the mouth and its contained organs (hypernutrition and hyponutrition). The hyperacid diathesis—The hypoacid diathesis. Malformations of the hard and soft palate. Inflammation in general. Degenerations and infiltrations. Diseases of the jaws. Osteitis (proliferating and rarefying). Osteomalacia. Septicemia. Sepsimia. Pyemia. Macroscopic and microscopic anatomy of the hard and soft tissues of the tooth. Chemistry of fermentation. Dental caries. Developmental defects and diseases of the dentine. Developmental defects and diseases of the cementum. Diseases of the peridental membrane. Pyorrhea alveolaris. Pericemental abscess. Chemistry of the decomposition of nitrogenous bodies. Animal alkaloids. Disease of the pulp. Diseases of the alveolar process. Diseases of the gums. Neoplasms, malignant and benign. Diseases of the lining of the mouth. Diseases of the tongue. Diseases of the maxillary sinus. Systematic intoxication (organic and functional diseases) traceable to foci of infection in the teeth and jaws. Buccal syphilis. Buccal tuberculosis. Diagnostic significance of local disorders in the supporting tissues of the tooth and lining of the mouth in their bearing upon general intoxications.

Hours—Junior Year .....	64 hrs.
Senior Year .....	64 hrs.

Reference Books—Pathology of the Hard Tissues of the Teeth, Black; Special Dental Pathology, Black. The American Text-Book of Operative Dentistry, Kirk.

**DEPARTMENT OF CLINICAL DENTISTRY**

LEWIS E. FORD, Professor  
F. G. SALEY, Demonstrator  
G. L. MILLHAM, Demonstrator  
E. C. UNDERHILL, Demonstrator  
G. FLOYD JACKMAN, Demonstrator  
W. D. GILL, Demonstrator  
A. W. LUFKIN, Demonstrator

The department of clinical dentistry concerns itself with the supervision of the correct application of the principles and technique underlying the performance of operative procedures. At intervals of two weeks the student is directed to have in readiness for operative or prosthetic restorations cases determined upon by the head of the department. The student is required to give practical demonstrations of his ability to carry out successfully the operations indicated, the professor and his assistants supervising the several steps of the operation, pointing out weaknesses, suggesting improvements in technique and correcting misconceptions by the student of the teachings of the chairs involved. This course is intended exclusively for the senior student and is of invaluable aid by placing him in a position to correctly appreciate the necessity and duty of leaving no stone unturned in order to render to his patients the highest possible type of professional services.

This department has the assistance of a number of prominent practitioners, who in the capacity of special instructors impart to the students the technique of individual methods of operative and prosthetic procedure.

**DEPARTMENT OF GENERAL PATHOLOGY**

J. WALTER REEVES, Professor

This course of lectures and laboratory demonstrations is given throughout the Junior year. The principles of General Pathology are thoroughly studied, and each student is required at intervals to discuss certain assigned topics before the class. Written reviews, quizzes, and the demonstration of gross and microscopical specimens are the features of this course.

The schedule of the work in this department is as follows:

Health and Disease. General Consideration of the Etiology of Disease. Disturbances of circulation. Hyperemia and Anemia — Coagulation — Thrombosis — Stasis. Edema and Dropsy. Hemorrhages and Infarcts. Disturbances of nutri-

tion. Degeneration and infiltrations. Necrosis. Death. Hypertrophy and degeneration of tissues. Processes of repair. Tumors—Disturbances of development. Chronic infectious diseases. Tuberculosis, Syphilis. Actinomycosis. Glanders. Leprosy. Parasitic diseases—Blood parasites, intestinal parasites.

Hours .....64  
Books—Coplin's Pathology. Manual of Pathology,  
Green.

## DEPARTMENT OF GENERAL AND DENTAL HISTOLOGY

A. C. LA TOUCHE, Professor  
G. C. LEISURE, Demonstrator

The first semester of the Freshman year is given to the subject of General Histology. Four hours laboratory work and two hours lecture work a week are required to complete the course. The elementary histological structures, especially those about the head and oral cavity, are studied thoroughly.

Dental Histology is taught during the second semester. Embryo's heads which show all the phases of development of the teeth are used in this course, each student making drawings of typical phases of tooth-development. Special time is devoted to the preparation and study of the hard tissues, so that each student may learn minutely the structure of bone, enamel and dentine.

The histological laboratory is equipped with Bausch & Lomb microscopes, McIntyre projectoscopes and other necessary apparatus.

Books—Shafer's Essentials of Histology. Tomes  
Dental Anatomy. Noyes Dental Histology.

## DEPARTMENT OF BACTERIOLOGY

ETHEL LEONARD, B.S., M.D., Professor  
AUGUSTA ZUBER, A.B., M.D., Assistant

Bacteriology is taught in the Junior year by means of lectures, demonstrations and oral and written reviews. Eight weeks in practical laboratory work is required of each student.

### Lectures.

Two hours each week is given to the Junior class. Lectures and outline work from the regular text are assigned. During



this course especial emphasis is placed on the studies in immunity, the place of bacteria in nature, methods of classification of bacteria, and a detailed study of the various pathogenic bacteria with their effects on the animal body.

Written reviews are given monthly from the work assigned.

Demonstrations of certain technical details in water, milk and other public health analyses are given during the lecture periods.

### **Laboratory Courses.**

I. Elementary technical work is given to 20 students three times each week for a period of eight weeks. The principles of media preparation, sterilization methods and study of the organisms of the air is given during the first week. Each student is furnished with an oil immersion microscope, the different forms of culture media, and every necessary appliance to follow in detail the technique of isolating, cultivating and staining pure cultures of the non-pathogenic and pathogenic bacteria which are assigned for study.

During the last week of the course the student receives a bouillon culture of an unknown number of bacteria and is expected to isolate each organism in pure culture. Regular printed laboratory forms are kept by the student for detailed description of each bacterium studied.

II. Advanced technical work is given to such Junior and Senior students as show special efficiency in the elementary courses. Bacteriological studies in cases of pyorrhea from the Operatory are made. The technique of the manufacture of vaccines including their standardization and sterilization is given to these students.

III. Research work is provided for in this department so that any student in either the Junior or Senior class who has shown himself proficient in the courses detailed above may be provided with a laboratory outfit and continue his work under the supervision of the professor and assistants.

It is the aim of this department to increase the scope of bacteriology in dentistry and to prepare each student who leaves the institution to continue bacteriological work in conjunction with his own practice.

### **Text Books:**

Principles of Bacteriology, Abbot.

General Bacteriology, Jordan.

Text-book of Bacteriology, Hiss & Zinsser.

Infection, Immunity and Serum Therapy, Ricketts.



## DEPARTMENT OF RHINOLOGY AND LARYNGOLOGY

JOHN MCKENZIE BROWN, M.D., Lecturer

The course in Rhinology and Laryngology consists in lectures and demonstrations on the anatomy, physiology, and pathology of the nose and throat, and the diagnosis and treatment of the commoner diseases of these organs and their special relationship to dental surgery, and in particular to orthodontia.

Hours .....6 hrs.

## DEPARTMENT OF PHYSICAL DIAGNOSIS

J. WALTER REEVES, Professor

The object of this department is to familiarize the student with such diagnostic procedures as are indispensable to an appreciation of the health status of his patients, especially in so far as the administration of anesthetics is concerned, or the undertaking of protracted operations in individuals with functional or organic lesions of the viscera. The course comprises lecture room work and clinics at the Los Angeles County Hospital, the patients in the medical wards being accessible to the department of instruction, under the immediate supervision of Professor Reeves.

Hours .....16

Book—Slade's Physical Diagnosis.

## DEPARTMENT OF ETHICS AND HYGIENE

GARRETT NEWKIRK, Professor

BERT BOYD, Lecturer

### Ethics

1. General principles; brief history.
2. In relation to one's clients and to civic life. Idea of service.

### Hygiene

1. Definition, general principles, history.
2. Application—to the dentist himself: Laws of diet, exercise, cleanliness, sleep and rest, mental influence, etc.
3. Hygiene as related to dental office and equipment.
4. Oral hygiene, especially as related to the young in family or school.

Hours .....16 hrs.

## DEPARTMENT OF EXTRACTION AND ANESTHETICS

ROY L. SPENCER, Lecturer

E. C. UNDERHILL, Clinical Instructor

C. J. APABLASA, Clinical Instructor

H. E. STRAUB, Clinical Instructor

This course embraces a series of lectures upon the principles and practice of extracting. With a well-equipped extracting room and abundant clinical material, the student is afforded ample opportunity to become skilled in this work. This course is given in the Junior and Senior years. The course of fourteen lectures covers the following subjects:

Preparation and technique of administration of local and general anesthetics. Extracting instruments and their sterilization. Principles and practice of all classes of extractions. Preparation of patients and after treatment. Use of elevators and special instruments illustrated on skulls and models. Management of extracting patients. The value of suggestive therapeutics.

## DEPARTMENT OF INTERNAL MEDICINE

R. S. CUMMINGS, M.D., Lecturer

This course open to members of the Senior class only, consists of a series of lectures on general diseases and their relation to dentistry.

Hours .....6 hrs.

## DEPARTMENT OF DISEASES OF CHILDREN'S TEETH

M. EVANGELINE JORDON, Special Lecturer and Instructor

Lectures and clinical demonstrations will be given to students of the Junior and Senior classes. Ten lectures will be given during the Junior year and a series of clinical demonstrations during the first semester of the Senior year.

## FEES AND EXPENSES

Fees are payable in two equal installments—October 1st and February 1st.

No student will be admitted for less than the stated fees.

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

**Freshman Year**

Matriculation fee .....	\$ 5.00
Lecture ticket .....	170.00
Chemical laboratory deposit.....	5.00
Anatomical specimens, rental fee.....	1.00
	<hr/>
	\$181.00

**Junior Year**

Matriculation fee .....	\$ 5.00
Lecture ticket .....	170.00
Chemical laboratory deposit.....	5.00
Anatomical specimens, rental fee.....	1.00
	<hr/>
	\$181.00

**Senior Year**

Matriculation fee .....	\$ 5.00
Lecture ticket .....	170.00
	<hr/>
	\$175.00

These fees include dissecting and all other laboratory fees.

**Cost of Books and Instruments**

Before beginning his work, each student must possess all the required instruments.

All of the books and instruments employed are needed after graduation. The outfit includes a dental engine, and enables the student to start practice, on finishing his course, without much additional expense for instruments. A list of the instruments is furnished the student on his arrival.

The approximate cost is as follows:

Freshman year .....	\$125.00
Junior year .....	135.00
Senior year .....	85.00

Students are not admitted to class work and the Operatory until after purchasing the required books and instruments.

Students are advised to defer purchasing text-books until they have met the various professors and instructors in the classroom and have been instructed definitely as to the books required in the different departments.

### **Omicron Kappa Upsilon**

As an encouragement to higher scholastic endeavor on the part of dental students, a chapter of Omicron Kappa Upsilon, honorary fraternity, has recently been organized. There will be annually elected from the Senior class a number of students, not exceeding 12 per cent of the class, who, besides character requisites, according to the official records of the institution, rank highest in scholarship.

### **Additional Items of Information**

Blank forms of application for admission will be sent by the Dean upon request.

All fees due the College are payable to the Treasurer at the office of the College.

The matriculation fee must be paid to the Dean before the name of a student will be recorded.

There will be no return of fees by reason of suspension or expulsion.

When the student is obliged to withdraw from the College before the last four weeks of a session for no misdemeanors, but for good and sufficient reason, to be determined in all cases by the Faculty, he is entitled to a remission of three-fourths of the amount due for that portion of the time during which he receives no instruction; this remission to date from the reception by the Dean of a written notice of the student's withdrawal from the College.

A student may be called upon at any time to satisfy an instructor that he is pursuing the work of his department satisfactorily.

Late arrival at an examination debars a student from the privilege of taking it. A special examination may be given upon payment of a fee of \$5.00.

Graduate dentists are admitted to the Operatory for a smaller fee where the degree is not taken.

The student can live in Los Angeles as in other large cities, according to his means or his habits of life. Good room and board near the college may be had for \$25.00 per month.

Laboratory benches and operating chairs are assigned to students in the order of matriculation, and each student is required to employ the same throughout the session.

Students will not be admitted to class work or the Operatory until after purchasing required books and instruments.

Operations in the technique departments of the school require a large number of natural teeth, and a sufficient

supply is sometimes difficult to procure. Students will therefore find it to their advantage to bring all the extracted teeth they can obtain.

Alumni and friends of the College are requested to donate as many extracted teeth as possible. The College will be grateful for such favors and will gladly pay all express or other charges on such packages.

Blank forms of application for admission will be sent by the Dean or the Registrar of the University on request.

Address all communications to the

COLLEGE OF DENTISTRY  
University of Southern California  
Lewis E. Ford, D.D.S., Dean  
Los Angeles Street at Sixteenth  
Los Angeles



# THE COLLEGE OF THEOLOGY

## HISTORICAL

The Southern California Annual Conference of the Methodist Episcopal Church, at its first session in 1876, gave earnest thought to the subject of Christian education. In that year the Conference recognized a school that had been established by the Reverend and Mrs. O. S. Frambes and adopted it as the "Los Angeles Academy."

In 1879 the Conference decided to organize the University of Southern California and elected its first Board of Directors, and in 1880 the trustees of the Academy closed the school and transferred its property to the University. In September of that year Bishops Wiley and Simpson laid the corner stone of the first University building (the one now occupied by the Department of Civil Engineering), and in October the doors were opened to students in the University of Southern California.

In 1884 the Committee on Education reported to the annual conference a resolution recommending "Our Theological Schools at Boston, Madison and Evanston," and hoping that "the day may not be far distant when we can add this department to our own University." Through the generosity of the Honorable Charles Maclay of San Fernando, California, this hope began to be realized the next year. The University Year Book, 1885-6, reports a three-story brick building 70x90 feet in dimensions, and a campus of ten acres, as the equipment of the "Maclay College of Theology."

Its first Dean was the Reverend R. W. Farnsworth, taken for this place from the Presiding Eldership of the Los Angeles District. The appointment of the Reverend Fletcher B. Cherrington, A. M., and the Reverend James Blackledge, A. M., completed the initial Faculty and the College opened. On the death of Dean Farnsworth, the Reverend F. B. Cherrington was appointed Acting Dean for the remainder of the school year. The Reverend R. S. Maclay, D.D., veteran missionary from the Orient, and brother of Senator Charles Maclay, was then called to the headship of the College that bears his name. When advancing years and failing health caused the resignation of Dr. Maclay, the Reverend George Cochran, D.D., was elected to succeed him. Through this period the new School of Theology did excellent work, coming about the time of the succession of Dr. Cochran from its

home in San Fernando to the immediate neighborhood of the College of Liberal Arts in Los Angeles.

In the hard times of 1893 the Trustees thought it expedient to close the Maclay College until its resources should warrant the continuance of its work.

In 1907, on the urgent request of the Annual Conference, the Trustees of the University decided to re-open the School of Theology, and upon request of the Board, Ezra A. Healy, D.D., just completing his seventh year in the pastorate of the University Church, was assigned to the task of reorganizing Maclay College and was appointed Dean. The first class under the new regime was graduated in 1911.

### COURSES OF INSTRUCTION

It is the aim of the College of Theology to do all that is possible to furnish the churches of our constituency with preachers who shall be at once scholarly and evangelical, and pastors who shall be apt and successful in their difficult work. As will be seen by reference to the accompanying table, undergraduates in the Annual Conference find here that nearly all the subjects required in the Conference Courses may be taken in the regular college classes. The student, therefore, has the great advantage of substituting drill, question, and preparation of papers for solitary reading.

In pursuance of this aim the following courses are arranged with the specified conditions of admission:

1. **The Degree Course.** A three years' course for students who have obtained the A.B. degree. The completion of this course will entitle the graduate to the degree of Bachelor of Divinity.

2. **The Diploma Course.** For the diploma the requirement includes all the subjects in the degree course except Hebrew. The candidate must have at least junior standing in Liberal Arts.

Subjects in the Conference Courses of study are included in the Maclay curriculum and the certificate of the College is accepted by the Conference Board of Examiners.

### SPECIAL STUDENTS

Applicants will be admitted as special students in the above courses, and students who wish to pursue selected studies in the College, but do not intend to graduate, may be admitted as Special Students upon recommendation by the Dean and approval of the Faculty. Certificates will be given for all subjects satisfactorily taken.

**COURSES****CLASSICAL  
(DEGREE)****Junior Class**

CHURCH HISTORY  
 ENGLISH BIBLE  
 ELEMENTARY GREEK  
 HEBREW  
 HOMILETICS  
 MODERN MISSIONS  
 PASTORAL THEOLOGY  
 SYSTEMATIC THEOLOGY

**Middle Class**

CHURCH HISTORY  
 ENGLISH BIBLE  
 N. T. GREEK EXEGESIS  
 HEBREW  
 ORIENTAL MISSIONS  
 PASTORAL THEOLOGY  
 SOCIOLOGY  
 SYSTEMATIC THEOLOGY

**Senior Class**

COMPARATIVE RELIGION  
 HEBREW  
 N. T. GREEK EXEGESIS  
 PASTORAL THEOLOGY  
 SACRED ORATORY  
 SOCIOLOGY  
 SYSTEMATIC THEOLOGY

**GREEK-ENGLISH  
(DIPLOMA)****Junior Class**

CHURCH HISTORY  
 ENGLISH BIBLE  
 ELEMENTARY GREEK  
 HOMILETICS  
 MODERN MISSIONS  
 PASTORAL THEOLOGY  
 SYSTEMATIC THEOLOGY

**Middle Class**

CHURCH HISTORY  
 ENGLISH BIBLE  
 N. T. GREEK EXEGESIS  
 ORIENTAL MISSIONS  
 PASTORAL THEOLOGY  
 SOCIOLOGY  
 SYSTEMATIC THEOLOGY

**Senior Class**

COMPARATIVE RELIGION  
 N. T. GREEK EXEGESIS  
 PASTORAL THEOLOGY  
 SACRED ORATORY  
 SOCIOLOGY  
 SYSTEMATIC THEOLOGY

**GRADUATION**

A pre-requisite for the degree of Bachelor of Divinity is the Bachelor's degree in Arts. For the Diploma of the College a candidate must have completed the Freshman and Sophomore years of undergraduate work in Liberal Arts.

**THESES**

Applicants for the degree of Bachelor of Divinity, or for the Diploma, must present, on or before May first preceding graduation, a thesis of not fewer than four thousand words

on a subject germane to a theological course. The theme may be selected by the applicant, but the selection must be approved by the Faculty. Thesis must be type-written, on good paper, eight and one-half by eleven inches in size, bound and presented in duplicate.

## DEPARTMENTS OF INSTRUCTION

### RELIGIOUS EDUCATION AND THE ENGLISH BIBLE

JOHN G. HILL, J. H. MONTGOMERY, Professors  
CARL S. KNOFF, Assistant Professor

**1. The Pentateuch and Other Historical Books of the Old Testament.** The origin, history, tradition, cosmology, morals, laws, government, and religious philosophy of the Hebrews from Abraham to Solomon will be considered. The questions of date, authorship, purpose, plan, style of literary composition and ruling ideas of each book will be studied. Two units; first semester. (Knopf.)

**2. The Prophetic and Chronicle Books of the Old Testament.** This course will survey the varied and swiftly changing periods of Hebrew history from the close of the United Kingdom to the end of Old Testament times. The greatest stress will be laid upon the study of the prophets; their unique place and power, their relation to state and Church, their distinctive messages and permanent contribution to the history of religion. Two units; second semester. (Knopf.)

**10. The Apostolic Age of the New Testament.** This course is a careful survey of the Apostolic Church of the first century, its origin, its strange success, its painful conflicts with Judaism, its brutal persecutions by Paganism, and its new life in the dying Empire; also a comparison of the religious ideas of Paul, Peter, James, and John, and of their mode of inspiration. Two units; first semester. (Hill.)

**11. The Gospel History and Literature of the New Testament.** A study of the life, teachings, work, and significance of Jesus Christ as portrayed in the Four Gospels and as seen against the historic background of modern scholarship. Special emphasis is laid upon the living authority of Jesus and the ruling ideas of the Sermon on the Mount in sharp contrast to Jewish and Pagan religious ideas. Two units; second semester. (Hill.)



**100. Israel's Wisdom and Poetic Literature.** An advanced course in the wisdom and poetic literature of the Testaments, together with a study of fragments from the Apocrypha. Comparison is made with Egyptian, Babylonian and Greek literature. Two units; both semesters.

**101. The Bible as Literature.** A survey course covering the entire Biblical field from the literary standpoint. The great epics, lyrics, dramas, biographies, essays, etc., are studied with a view to exact knowledge and correct interpretation of them. The necessary historical background is included.

**102. Israel's Social Institutions.** The evolution of the Hebrew family, tribe and state, including a study of Semitic origins. The course is designed to give the student knowledge of the customs and ideals of the Semitic peoples, in order to better understand references to them in the Scriptures. Laws of marriage, blood-revenge, sacrifice, resident alien, etc., are noted and the social and democratic ideals of the Old Testament carefully collated. Two units; second semester.

**109. The Social Teachings of Jesus and of the Prophets.** Two hours, each semester. (Hill.)

**110. The Teachings of Jesus in the Gospels.** A critical study of Jesus' utterances as to his authority, ruling ideas, ethical claims, social program, growing self-consciousness, and views on sin, salvation, death, the future, etc. Two units; first semester. (Hill.)

**112. The Messianic Age.** A study of the appearance and development of the Messianic hope in the ancient world. Egyptian, Babylonian, Persian, Hebrew and other Oriental religions are considered. A critical appreciation of Christianity as the final expression and fulfillment of this hope is included. Two units; both semesters.

**113. The Pauline Theology.** A study of the theology of the Apostle Paul as revealed in his Epistles and in his discourses recorded in the Acts of the Apostles. Two units; second semester. (Douglas.)

**114. The Johannean Theology.** The teaching of Jesus according to the Gospel of John, and the theology of John as revealed in his Gospel, Epistles, and the Apocalypse. Two units; first semester. (Douglas.)



**120. Religious Pedagogy.** A course designed to fit the student for teaching Bible classes in Sunday Schools, teacher-training courses, etc. The teacher, his work, qualifications and preparation; the student, his physical, mental, and moral nature; the lesson; the teacher's approach to the student, etc. Two units; first semester. (Montgomery.)

**121. The Modern Organization of the Church.** The Sunday School, Young People's Societies, various types of church organization; duties of various officers, committees, etc. A course designed to fit for more efficient lay service in the church. Two units; second semester. (Montgomery.)

**142. The Social Message of the Gospel.** The moral basis of the social question; Christ's estimate of life; the social ideals of the Kingdom. Various social institutions are examined to see if they conform to the Kingdom ideal. The lines of co-operation and leadership of the church are indicated. Two units; second semester. (Montgomery.)

## **BIBLICAL ARCHEOLOGY**

**CARL S. KNOFF**, Professor

This course deals primarily with the ancient Babylonian and Assyrian inscriptions which relate themselves to the Old Testament. By an easy inductive method, the student will learn some of the simpler cuneiform signs and a limited vocabulary. Reading of inscriptions will begin at once, and the aim will be to familiarize the student with the field and arouse interest for further study. Opportunity will be given to handle and translate some of the actual tablets. Some of the material studied will include Sennacherib's own story of the siege of Jerusalem; Sargon's capture of Samaria; letters from time of Abraham; Contracts of Belshazzar; etc. Course will be supplemented by stereopticon lectures. 1 hour, both semesters.

## **MISSIONS**

**ROBERT J. TAYLOR**, Professor

This course of lectures deals with the History of Missions in all lands. The study comprises the periods of preparation for modern missions; the present conditions in non-Christian mission fields; men and methods in missionary work; a survey of the Methodist Episcopal Missions; the problems of specific fields; the extent of occupancy; and the qualifications and types of leadership needed in different countries.

Students who anticipate work in the foreign field will find this course an excellent preparation for further pursuance of their studies of Oriental questions in the special department of which Dr. James Main Dixon is the Director.

**21. The Genesis of Missions.** A study of the nature, universality and purpose of religion, and a comparison of Christianity with the non-Christian religions. The spread of Christianity throughout the Graeco-Roman world, with special attention given to the difficulties which confronted the early church; followed by a survey of the missionary movements which resulted in the winning of Northern Europe. Lectures, reports, and readings. Two units; first semester. (Taylor.)

**22. The Modern Progress of Christianity.** A study of Christianity since the Reformation. The development of the missionary movements of Protestantism from the time of the Pietists and Moravians to present-day missionary organizations, followed by a study of Christianity in its world-wide reach. Lectures, assignments and papers. Two units; second semester. (Taylor.)

**23. Missions in the Far East and the Pacific Islands.** (a) **The Evolution of China.** A study of the physical, historical, social and religious viewpoints, and of the missionary problems, methods and results. (b) **The New Japan.** A study of the rapid rise of Japan out of the feudal conditions, and a survey of the history and present problems of Christian missions. (c) **The Pacific Islands.** A study of the Christian forces in the Philippines and the Pacific Island groups. Two units; first semester. (Taylor.)

**24. Missions in India, Moslem Lands, Africa and Spanish-America.** (a) **The Awakening of India.** A study of the history of the Indian peoples, followed by a survey of Christian missions, their problems and work. (b) **The Mohammedan World.** A study of Mohammedanism as a force in the world today. Special use is made of the Koran. (c) **The Redemption of Africa.** A study of the physical and racial problems and of the pagan people. (d) **The Rise of Spanish-America.** A study of the aboriginal races of the Americas, the Spanish conquest, the colonial and war periods, and present-day struggles in South America and Mexico. This course is concluded by a study of the history and problems of Protestant missions. Two units; second semester. (Taylor.)

## **ORIENTAL PHILOSOPHY AND COMPARATIVE RELIGION**

**JAMES MAIN DIXON**, Professor

**Oriental Philosophy and Religions.** Zoroastrianism, the Forest Philosophers of India, Hindu Speculation, Buddhism, Shamanism, Confucianism, Taoism, Shintoism and Bushido. Two units; first semester.

**Missions in India and Persia Since the Days of Ziegenbalg.** The life work of Carey, Martyn, Duff. The Judsons in Further India. Two units; second semester.

Alternate with—

**The Civilization of Japan.** Two units; first semester.

**Missions in Japan, Korea, Formosa and the Philippines.** Two units; second semester.

## **SPECIAL STUDY OF CHINA**

**JOHN HEDLEY**, Lecturer

**The Civilization of China.** Text book: Fryer's "Oriental Studies." One unit; first semester.

**Missions in China: the Problem Today.** One unit; second semester.

## **HYMNOLOGY**

A study of Hymns, ancient and modern, with critical discussions. Two hours; second semester. (Dixon.)

## **NEW TESTAMENT GREEK**

**CLAUDE C. DOUGLAS**, Professor

1. **Beginning Greek.** Those who have had no previous training in the Greek language will register for first year's work in the College of Liberal Arts, including exercises in any of the beginning books and one book of the "Anabasis" or its equivalent. Five hours each semester.

2. **The First Year's Work in the New Testament** will consist of reading portions of the Gospels connected historically, with constant review of forms and constructions as a necessary basis for correct interpretation and exegesis. Exegesis of the Pastoral Epistles. Three hours each semester.

3. **The Second Year in New Testament** will be devoted to an exegetical study of Galatians, Corinthians, Romans, Philipians, Thessalonians and Hebrews. Three hours each semester.

## HEBREW LANGUAGE AND HISTORY

JAMES BLACKLEDGE, Professor

The main object of instruction in this department is the securing of a good reading knowledge of the Hebrew text; hence during the first two years of the course special attention is given to oral class-reading exercises, the fundamental principles and rules underlying the Hebrew language, and the origin of grammatical forms, with some exegetical study during the second semester of the second year. The method employed aims, by constant review and frequent composition exercises, to make an otherwise dry subject as interesting as possible.

The greater part of the first two years is devoted to the study of the text of the Pentateuch. During this time the student is requested to look up the inscriptions of Israel's Neighbors—the Assyrians and Babylonians—in the library, as an aid in the study of the text. The latter half of the course will be largely devoted to exegetical studies, studies in Messianic prophecy and in the minor prophets, and a critical study of the Book of Job. During the last semester there will be grammatical, critical and exegetical studies of selections from the Book of Psalms. During the entire course occasional lectures will be given on the Old Testament and related subjects. Two hours each semester.

## CHURCH HISTORY

TULLY C. KNOLES, Professor

The first year begins with the doctrinal development of the early Church, its controversies and councils; the adoption of the Church by the State, and the result; the rise of the Holy Roman Empire, and the organization of the Papacy. It discusses the great men of the early Church and the latter results of monasticism and the Crusades; the rise and spread of Mohammedanism; Scholasticism and the Renaissance; and the pre-Reformation men and movements. Epochs are dwelt with and an attempt is made to lead the student to study the great formative movements, and to relate one event to another, and thus to study advances and reactions. The history



of doctrine is reviewed, with special attention to those tenets having far-reaching results. Two units; both semesters.

#### SECOND YEAR

**108 Renaissance.** A study of the Renaissance as it affected European life and thought, with special reference to artistic, literary, and political features. Open to well qualified Sophomores. Two units; first semester. (Klingberg.)

**109. The Reformation.** A study of the Reformation as it affected the religious, economic, and political development of Europe. Open to well qualified Sophomores. Two units; second semester. (Klingberg.)

### HOMILETICS AND PASTORAL THEOLOGY

W. E. TILROE, Professor

The whole range of the life and work of a minister of the Gospel passes under review in these courses, which continue through two years. The call and commission of the preacher, the history of preaching with notice of some of the eminent preachers of the past and the present, doctrinal preaching, evangelistic preaching, the pastor and the Sunday School, the minister and social problems, church organization, the institutional church, pastoral visitation, and kindred subjects, will all have the consideration that their importance demands. In the special department of Homiletics the written sermon, the extemporaneous sermon, and the exercise of preaching before the student body will have prominent place. Two hours each semester.

### SYSTEMATIC THEOLOGY

DEAN EZRA A. HEALY

In the Junior year the text book is Curtis' "The Christian Faith"; in the Middle year Sheldon's "System of Christian Doctrine." While these works form the basis of study for the students out of class, a wide reference to authors, old and new, is encouraged, and all is supplemented by lectures and questions in the classroom hour. In the Senior year research in the library and in current theological literature, with essays on assigned subjects, and a continued attendance in the lecture room, will complete the work in this important field.

The earnest and consistent aim of this department is to discover, maintain and defend the essentials of the Christian system. A solid Biblical basis is sought for every doctrine.



Special centers of study are the Deity of the Lord Jesus, the Atonement, and the Salvation which is by Faith.

Two hours each semester.

## **SOCIOLOGY**

EMORY S. BOGARDUS, ROCKWELL D. HUNT, Professors

GEORGE F. KENNGOTT, Associate

HARRY J. McCLEAN, Lecturer

ROSCOE L. FRASHER, Assistant

**1. Introduction to Sociology.** A comprehensive study of social progress, with frequent application to concrete conditions. The year's work closes with a summary of social progress. The course is intended to serve as an introduction not only to other courses in Sociology but also to the other social sciences. Two units; throughout the year. (Bogardus.)

**100. Principles of Sociology.** An introductory course for upper division and graduate students. A fundamental course presenting an analytical study of social life and the forces of its orderly development, intended to lay substantial foundation for more advanced work. A good knowledge of history and an acquaintance with biology and psychology are desirable. Three units; first semester. (Bogardus.)

**102. Labor Problems.** A discussion of the leading problems confronting men and women engaged in industry. (Same as Economics 102.) Three units; second semester. (Hunt.)

**120. Social Psychology.** Based on assigned readings in Ross, McDougall, Baldwin, Cooley, and others. The social instincts, the development of the self, the social nature of the self. Imitation, custom imitation, fashion imitation. Suggestibility, the crowd, the mob, formation of permanent groups, group conflicts, group leadership, group consciousness. The formation of public opinion, its fundamental part in maintaining group stability and in securing group advancement. Two units; first semester. (Bogardus.)

**114. Criminology.** A study of crime from sociological and psychological points of view. Special attention is given to methods for the prevention of crime. Some of the topics considered are: History of methods of punishment, prison systems, prison reform, probation, juvenile court, the George Junior Republic idea, juvenile self-government. Two units; second semester. (Bogardus.)

**108. The Liquor Problem.** A discussion of the economic and social phases of the liquor problem. (Same as Economics 108.) One unit; throughout the year. (Hunt.)

### ENGLISH LANGUAGE AND LITERATURE

ALLISON GAW, PAUL S. WOOD, BENJAMIN F. STELTER, JAMES  
MAIN DIXON, Professors

**1. Introductory Course.** Practice in composition, based upon a study of representative works in English literature. Required of all candidates for the bachelor's degree. Three units; throughout the year. (Gaw, Wood, Stelter, Scott.)

**20. General History of English Literature.** Required of all students intending to do major work in English, and in general prerequisite to all courses in literature above Sophomore grade. Three units; throughout the year. (Stelter, Scott.)

**133. The Period of Milton.** Milton's poetry and most important prose. Selections from the Church poets, Cavaliers, and prose writers of the period. Three units; second semester. (Stelter.)

**145. American Literature.** A survey from the beginnings in the colonial period to the present day. Three units; first semester. (Wood.)

**154. Shakespeare.** Analytical study of a series of Shakespeare's plays in chronological order, in the light of English dramatic history and the contemporary social conditions. Not offered, 1915-1916. Three units; first semester. (Gaw.)

**177. Bunyan.** A study of the life and works of the Puritan allegorist and idealist. Two units; first semester. (Dixon.)

**183a. Tennyson.** The poet as lyricist and as interpreter of his age, with special attention to "In Memoriam." Two units; second semester. (Dixon.)

### SACRED ORATORY

The course includes a study of the speaking voice, and those fundamentals of expression requisite for a pulpit speaker. It is the aim to teach a student to be simple and natural in his expression and when occasion shall demand, powerful, but at all times to preserve his individuality. The text used is "Vocal and Literary Interpretation of the Bible." (S. S. Curry.)

**Course 2.** Voice Building, Relaxation, breathing, tone placement, resonance, rhythm, phrasing, melody; development of purity, strength, quality and control of tone. Two hours; both semesters.

**Course 7.** Public Speaking: The consideration and delivery of the various forms of public address, with platform exercises throughout the course. Rapid formulation of thought and its effective presentation is acquired. Two hours; second semester. Bible and Hymn Reading will be included in this course.

### SPECIAL ADVANTAGES

The School of Theology is in the immediate neighborhood of the College of Liberal Arts. It is constantly urged upon our students that the religious leaders must be intellectual leaders, and so a degree in Arts is made a prerequisite to a degree in Theology.

The intellectual atmosphere of the University tends to foster ambition in our men so that some who come intending to take special work only, or at most the Diploma course, change their purpose and are glad to graduate in both Arts and Theology.

Students taking either course in Theology will be allowed four hours in each semester in the College of Liberal Arts free of charge.

The Pauline Association, organized by the students of Maclay for mutual literary and religious improvement, is useful and flourishing.

The Young Men's Christian Association of the University is well sustained and offers a fine field for both growth and work.

Able men are in the pulpits of the city churches and so inspiring models of Gospel preaching are always available.

The Methodist Mission of Los Angeles calls upon our men for help throughout the year, furnishing opportunity for the best kind of training.

### FEES AND EXPENSES

Tuition in Maclay College is free.

A registration of \$12.00 a semester is charged.

Graduation fee five dollars.

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

The requirement of two hours throughout the Senior year in Sacred Oratory is met by enrollment in the College of Oratory, and does not involve extra expense.

Lectures by men and women of eminence in special fields are frequently given in the Assembly Hall and are free to all our students.

Free residence in the Maclay College Building is provided for a limited number. Rooms will be assigned in the order of accepted applications.

Numerous churches in the vicinity of Los Angeles find pastors among our students, and the District Superintendents are glad to make such arrangements where it is mutually satisfactory.

An information and employment bureau is maintained by the University Y. M. C. A., which is very helpful to those who wish to support themselves while in attendance at college.

Any additional information promptly given on application to

E. A. HEALY, Dean,  
The Maclay College of Theology,  
University of Southern California,  
Los Angeles.

# THE COLLEGE OF PHARMACY

The pharmacist of today requires a high grade of technical knowledge. The College of Pharmacy, an integral department of the University of Southern California, was organized to supply this demand; its aim and purpose being to create a means for higher pharmaceutical education, and to supply a broader foundation for the student's professional career by providing systematic instruction and special training in those subjects requisite for the successful practice of pharmacy.

## LOCATION AND EQUIPMENT

The College of Pharmacy is located at 35th Place and University Avenue on the campus of the University of Southern California.

The advantages of the metropolitan location of this College in the city of Los Angeles are obvious.

For Equipment, see pp. 157-164.

## University Advantages

The close association of the student of the College of Pharmacy with those of the other colleges of the University on the campus affords valuable opportunities of social culture and of attending prominent lectures on subjects of vital interest to the student.

## SCHEDULE

The session will open October 1, 1917, and will continue until May 30, 1918. The schedule is arranged for the forenoon so as to allow students the privilege of retaining their positions as clerks in the stores of Los Angeles and neighboring towns while attending college. The hours of instruction are from 8 a. m. to 12 m.

## CURRICULUM

The subjects included in the curriculum are operative and dispensing Pharmacy; organic, inorganic, and analytical Chemistry; Botany; Materia Medica; Pharmacognosy; Toxicology; Hygiene; Physiology; Sanitary Science; Food and Drug Analysis; and Microscopy; together with special lectures upon business topics especially suited to the retail phar-



macist. The methods of instruction embrace lectures, demonstrations, recitations, written and oral examinations, constant laboratory work, and individual instruction.

### REQUIREMENTS FOR ADMISSION

a. Candidates for the degree of Graduate in Pharmacy will be admitted as follows:

1. The completion of two years of high-school work or its equivalent after eight years of grammar-school work.†

2. Graduation from an accredited high school or other preparatory school of approved rank, requiring for graduation not less than fifteen units\* of work successfully carried.

Any deficiencies in the entrance conditions may be removed in the Preparatory School of the University or with a tutor approved by the College of Pharmacy.

b. **To Advanced Standing.**—Students who have pursued courses of study in other colleges of pharmacy will be given credit for such portions of their work as are equivalent to the work required by this College.

c. **To Graduate Standing.**—Persons who have received the degree of Graduate in Pharmacy (Ph.G.) from this College, or who have received an equivalent training elsewhere, are eligible to the graduate courses. (See Courses, page 310.)

### EXAMINATIONS

Written examinations are held from time to time during the sessions in each of the subjects taught by the professors and the ratings received are recorded. Attendance upon these examinations is compulsory. Any student unavoidably absent is required to give the professor a written statement of the cause of his absence.

Each student is required to attend at least eighty per cent of the lectures and laboratory sessions in each department and failing to do so becomes ineligible for examinations except where, prior to the examination, he presents a satisfactory excuse for his absence.

---

†Credentials for the high school work done should be presented at the time of registration.

\*The term "unit" is here used to denote a preparatory subject studied throughout one school year with five class exercises (or the equivalent) a week. This grade of preparation is equivalent to that indicated for admission to the College of Liberal Arts, in present year-book, pages 31-50.

## CONDITIONS FOR GRADUATION

The candidate for the degree of Graduate in Pharmacy (Ph. G.) from this College must have fulfilled the following conditions:

1. He must be of good moral character and must have maintained an irreproachable moral standing while in attendance at this College.

2. He must have attended two full years in each of the departments of this College, or one year (the Senior) in this, after a course in some other recognized College of Pharmacy.

3. He must have attended at least eighty per cent of the lectures, reviews, and laboratory work.

4. He must be present at Commencement unless excused by the Dean.

## DEPARTMENTS OF INSTRUCTION

### PHARMACY

ARTHUR R. MAAS, Professor

1. **Junior Pharmacy.** The lectures of the Junior year treat of the history of the Pharmacopœia. The subjects of weights and measures, percentage solution, and the arithmetic of dispensing and manufacturing pharmacy are considered at length. Specific gravity and specific volume are demonstrated from various apparatus, which the lecturer thoroughly explains. Heat is next considered, and then the operations wherein heat is used, as evaporation, distillation, sublimation, desiccation, exsiccation, etc. This is followed by a discussion of the preservation of crude drugs and their preparation for manufacturing purposes, and the operations of decantation, filtration, clarification, maceration, infusion, decoction, and percolation. The standard galenical preparations are critically studied in alternation with those of extemporaneous pharmacy. While they are discussed from the standpoint of their several classifications, such individual preparations as merit it receive special consideration, the object being to familiarize the student with the reasons for each step taken in the manufacture of the different preparations. Two lectures and six laboratory periods each week; throughout the year, Junior year.

**2. Senior Pharmacy.** The lectures of the Senior year embrace the study of the inorganic and organic acids and the salts of the different metallic bases. The commercial methods of preparation are touched upon, and a special effort is made to teach the student how to prepare them extemporaneously when necessity arises. In addition to the official compounds, those unofficial ones which, through frequency of use, merit it, likewise receive attention. A study of alkaloids and the neutral principles of vegetable drugs follows. Extemporaneous pharmacy is then resumed, including a thorough discussion of dispensing. Facsimiles of physicians' prescriptions are, by means of the stereopticon, thrown upon a screen, and the class is drilled in reading those that are with difficulty legible. Chemical and Pharmaceutical incompatibilities are considered, and the best methods for overcoming them are discussed. Two lectures and six laboratory periods each week; throughout the year, Senior year.

**3. Manufacturing Pharmacy.** Visits are made to several large manufacturing establishments where the preparation of pills, tablets, fluid extracts, etc., is studied at length from a manufacturing standpoint.

## BOTANY AND MICROSCOPY

ANDREW C. LIFE, Professor

These courses in Botany and Microscopy are planned with especial reference to the needs of the pharmacist. Since most drugs are parts of plants or are plant-products, a thorough knowledge of plant life is necessary to their dispensing.

In these courses the student is furnished with a compound microscope, a hand lens, and dissecting instruments. The lecture room is supplied with a complete electrical projection apparatus by which microscopic objects can be thrown on the screen before the class.

**1. Botany.** The year is devoted to the study of seed-bearing plants (the Spermatophyta), following by a briefer consideration of the Algae and Fung (Thallophytes), the Mosses and Liverworts (Bryophytes), and the Ferns and their allies (Pteridophytes). (1) The parts of the flower, leaf, root, and stem are studied with reference to the classification of plants and the nomenclature in each of the more important families. (2) The microscopic structure of the parts of the plant is then studied in order to familiarize the student with the kinds of cells found in the stem, root, and leaves, preparatory to the

study of pharmacognosy. (3) A study is made of the manner in which drug products are produced by the life-processes and habits of plants. Special attention is given to those plants that are of importance to the pharmacist. One lecture and one laboratory hour per week; throughout the year, Junior year.

**2. Microscopy.** Throughout Course 1 the student has been learning the use of the microscope, its parts, the methods of preparing slides for temporary use, etc. In Course 2 the student examines and uses the different kinds of microscopes and accessories. He learns how to measure microscopic objects (micrometry) and how to prepare permanent slides of tissues and other objects. The laboratories are fitted up with a complete set of apparatus for photographing microscopic objects; ten styles of compound microscopes of foreign and American makes; four styles of microtomes; a camera lucida; condensers; micrometers; and several hundred prepared slides for use in class work and demonstration. Two hours laboratory per week; throughout the year, Senior year.

## **MATERIA MEDICA AND PHARMACOGNOSY**

LEWIS E. GILSON, Assistant Professor

CHARLES W. HILL, Lecturer

**1. Junior Course.** This course presents the subject in as broad, yet concise, form as possible. It is confined to that instruction that will be of greatest benefit to the student when the course is completed, giving larger consideration to those drugs that are most frequently met with in commerce. The course treats first of the drugs of vegetable (phanerogamic and cryptogamic) origin, and then proceeds to consider the drugs of animal derivation. These agents are considered in an order based upon a commercial classification; first the Roots, then the Rhizomes, the Bark, the Flowers, the Fruit, the Seeds, etc. Each drug is considered as to its nature, origin, commercial and botanical relation, microscopical structure, active principles, therapeutic action, doses, etc. Adulterations, admixtures, and substitutes are thoroughly discussed. The work is based upon the Pharmacopœia; at the same time due attention is given to those remedies that are unofficial. One lecture and two hours laboratory per week; throughout the year, Junior year.

## **CHEMISTRY**

LAIRD J. STABLER, Professor

**1. General Inorganic Chemistry.** This is a course of lectures and demonstrations designed to be an introductory



course in general chemistry, and including a consideration of the principles governing chemical action and a description of the properties of the various elements and their compounds, as well as drill in the meaning and use of symbols in chemical formulae and equations. Special emphasis is placed on chemical facts involved in the daily work of a pharmacist.

In the laboratory the student is provided with a complete equipment of apparatus for qualitative analysis. A detailed study of the chemical and physical properties of the non-metals and their more important compounds is made, and practical instruction is given in elementary qualitative analysis. Two lectures and six hours laboratory per week; first semester, Junior year.

**2. Qualitative Analysis.** This course, following that in General Inorganic Chemistry, is a study of the methods of separation and identification of the principal bases and acids. In this work the identity and purity tests of the Pharmacopœia are studied. The student analyzes for bases and acids a number of compounds unknown to him and makes tests for impurities in pharmaceutical and commercial chemicals. Two lectures and six hours laboratory per week; second semester, Junior year.

**3. Organic Chemistry.** The course covers the whole field of this branch, which is of first importance to the pharmacist. Special attention is paid to those compounds that are of pharmaceutical value, including synthetical and medicinal preparations. The following subjects are studied with care: Hydrocarbons, alcohols, ethers, compounds ethers, aldehydes, glycerin, fats, soaps, oils, carbohydrates, organic acids amines and amides, aromatic bodies, resins, albuminoids, cyanogen compounds, alkaloids, etc. Some of the important chemical operations occurring in nature receive attention, such as combustion, decay, fermentation, and putrefaction. The laboratory work consists of the preparation of typical organic preparations illustrating the general reactions involved in organic chemistry. Among the preparations made are ether, chloroform, iodoform, acetic ether, nitrous ether, acetanilide, methyl salicylate, etc. Two lectures and six hours laboratory per week; first semester, Senior year.

**4. Pharmaceutical Analysis and Specialties.** This course emphasizes general qualitative analysis, and then advances to those types of advanced special analysis upon which the pharmaceutical chemists may most frequently be called on to render expert opinion. Two lectures and six hours laboratory per week; second semester, Senior year.



The work of the course is divided as follows:

(a) **Quantitative Analysis.** An introduction to the underlying principles of gravimetric and volumetric analysis. Attention is paid to the standard "Volumetric Solutions" of the Pharmacopœia.

(b) **Toxicology.** Lectures in which are studied the different kinds of poisons, the classes of antidotes, the various bodily conditions that modify the effects of poisons, and the different channels by which poisons may enter the body. Later each poison is taken up in detail and studied as to its lethal dose, symptoms, antidote, and treatment. Attention is given to Posology, doses of potent drugs being given special emphasis. The practical laboratory work deals with the identification of the common poisons and also with the methods of separating them from various complex mixtures.

(c) **Urine Analysis.** Lectures on both the normal and the pathological constituents of urine. In the laboratory the qualitative and quantitative estimation of sugar, albumin, urea, etc., is studied, and microscopic examination is made of the sediment.

(d) **Food and Drug Analysis.** Lectures and laboratory work. Each student will be required to make a number of assays of United States Pharmacopœia preparations, and also to examine food products for preservatives and adulterants. The official methods of analysis of the Department of Agriculture will be employed.

## PHYSIOLOGY, HYGIENE, AND SANITARY SCIENCE

ALBERT B. ULREY, Professor

The action of drugs on the body is a subject demanding attention of the pharmacist. He is responsible both morally and legally for the results of his sale of drugs. A knowledge of the human body, its functions, and its proper care therefore becomes an absolute necessity to the present-day pharmacist.

1. **Physiology.** A study of the human body, its parts, and the way it carries on the functions of digestion, circulation, etc. All the systems of organs are considered, and each of the fundamental processes is studied. The semester's work prepares the student to understand to some extent what actions drugs may have on the body. One hour lecture and demonstration per week; first semester, Junior year.

**2. Hygiene.** The care of the body as to the use of foods, drink, fresh air, exercise, etc.; the methods by which one may enjoy health as a result of right living and the injury likely to result from wrong habits; and the place of drugs in everyday affairs as they are related to hygiene. One hour lecture and demonstration per week; second semester, Junior year.

**3. Bacteriology.** The nature of bacteria, the methods of growing them, and their place in nature. A sufficient acquaintance with these forms is attained to enable the pharmacist to know which bacteria are beneficial, which disease-producing; what conditions are harmful and what not; how to prevent decay in foods, and other substances; and the best methods of sterilizing and disinfection. Water, milk, and other foods receive special study with reference to the bacteria they contain. This course gives sufficient practice in handling bacteria to dissipate needless fear of them and to enable one to guard against the danger of infection where disease-producing forms are likely to be present. One hour lecture and demonstration per week; first semester, Senior year.

**4. Sanitary Science.** A study of (1) the nature of infectious diseases and their dissemination and control; (2) the problems of water-supply and sewage; (3) the distribution and care of foods in relation to the public health; (4) sanitary surveys of residences, resorts, and public buildings; and (5) the various agencies for the federal, state, and municipal supervision of the public health. Each student makes a study of a residence or a public building and incorporates his findings in a report to be completed prior to the final examinations. One lecture per week; second semester, Senior year.

### AUXILIARY LECTURE COURSES

C. L. LOWMAN, M.D., Lecturer in Medicine  
HOWARD P. PEAIRS, Lecturer in Jurisprudence  
L. SCHIFF, Lecturer in Commercial Pharmacy

**1. First Aid to the Injured.** This course of several lectures is planned to meet the immediate needs of the pharmacist, who is often called upon to render first aid in accidents and do general emergency work. The subjects touched on are wounds and their treatment, burns, fractures and dislocations, poisoning, resuscitation from unconscious conditions, bandaging, etc. Senior year.

**2. Commercial Pharmacy.** This course consists of several lectures on topics in connection with the conduct of the business of Pharmacy, such as buying, selling, insurance, advertising, bookkeeping, correspondence, and general business building. Senior year.

**3. Pharmacal Jurisprudence.** This course consists of several lectures in which the rights and responsibilities of pharmacists and the laws affecting them are taken up and fully considered. The statutes regulating the practice of Pharmacy, with their constitutionality, are discussed. The legal limits of Pharmacy, the right to practice, the legal qualifications of the pharmacist, etc., are considered, together with the liability of the pharmacist and the manufacturing pharmacist. Senior year.

## GRADUATE COURSE IN PHARMACY

The Graduate Course in Pharmacy is open to graduates of this college and to graduates of other colleges requiring equivalent qualifications for graduation. The course leads to the degree of Bachelor of Pharmacy (Phar. B.).

To attain to the degree of Bachelor of Pharmacy (Phar.B.), the candidate must have complied with the following conditions:

1. He must be a graduate of a high school requiring for graduation the completion of not less than the fifteen units required for admission to the College of Liberal Arts.

2. He must have received, at this College or from some other reputable College of Pharmacy, the degree of Graduate of Pharmacy (Ph.G.) under the conditions specified above.

3. He must have completed at this College a graduate course consisting of not less than twenty-five units of University work and including the preparation of a satisfactory thesis embodying the results of original investigation in a subject in or allied to pharmacy or chemistry.

The University courses from which the graduate course in Pharmacy may be elected, are as follows:\*

**Chemistry 7. Organic Chemistry.** Lectures and recitations on the chemistry of the carbon compounds. Perkin and Kipping's "Organic Chemistry." Two units; both semesters.

---

\*In the following list one "unit" equals one lecture or recitation hour or two laboratory hours.

**Chemistry 7a. Organic Preparations.** A laboratory course in the preparation of typical carbon-compounds in both the aliphatic and aromatic series, to accompany course 7. Two units; both semesters.

**Chemistry 7b. Organic Preparations—Advanced.** A laboratory course in the preparation of higher organic compounds, with supplementary reading on theory and methods. This course is recommended to graduate students who expect to do technical work in the field covered by organic chemistry, or who desire to pursue research in chemistry for higher degree. Either or both semesters.

**Chemistry 8. Mineral Analysis.** Gravimetric and volumetric analysis of representative minerals, ores, and alloys. Prerequisite, course 4 or its equivalent. Three or five units; either semester.

**Chemistry 9. Physical Chemistry.** A lecture course or its equivalent. A general study of electro-chemistry is included in the work of the second semester. Bigelow's "Theoretical and Physical Chemistry" will be used as a main reference book. Two units; throughout the year.

**Chemistry 9a. Physical Chemical Measurements.** A laboratory course to accompany or follow course 9. Molecular and atomic weight-determinations by vapor-density, boiling-point and freezing-point methods. Problems in chemical equilibrium and reaction velocity. Determination of conductivity of electrolytes, fraction ionized, ionic mobility, single and double potentials, the preparation of standard cells. Three hours of laboratory work a week. One unit; throughout the year.

**Chemistry 10. Quantitative Analysis of Agricultural Products.** Systematic analysis of soils, fertilizers, water, dairy products, etc. Prerequisite, course 4 or its equivalent. Three or five units; either semester.

**Chemistry 12. Food Analysis.** A laboratory course in the chemistry of meat and meat products, edibles and fats, dairy products, cereal products, saccharine products, canned vegetables, cocoa, tea, coffee, spices, vinegar, flavoring extracts, fruits and fruit products, fermented and distilled liquors, baking powders, food preservatives, and coloring matter. Open to students who have completed courses 4 and 7. Two units; either semester.

**Chemistry 13. Industrial Chemistry.** A lecture course covering the chemistry involved in the manufacture of oils, soap,



sugar, explosives, and other commercial products. Lectures will be given by chemists from various manufacturing establishments. Prerequisites, courses 2, 3, and 7. One unit; second semester.

**Chemistry 13a. Oil and Gas Analysis.** A laboratory course in commercial oil and gas analysis. A special oil laboratory is equipped for handling crude petroleum on a basis commensurate with commercial practice. Two units; second semester.

**Chemistry 14. Assaying.** This course comprises silver and gold extraction by scorification and crucible methods; the fire-assay of copper, lead, and tin; the extraction of gold from ores by the amalgamation, the chlorination, the cyanide, and the electrolytic processes. Two units; second semester.

**Chemistry 16. Research.** Research work, under the direction of the department, may be pursued in either pure or applied Chemistry.

**Biology 20. Advanced Bacteriology and Sanitary Science.** The course consists of an advanced study of Bacteriology in its relation to hygiene, sanitary science, and the work of the pharmacist. It consists in part of testing water, staining bacteria, and testing disinfectants, together with a study of the bacteria of foods. Two units; throughout the year.

**Pharmacy 30. Thesis.** Graduate students are required to present a graduating thesis showing the result of some original work in one of the departments of pharmacy. The subject of the thesis must have the approval of the professor in whose department the thesis is selected. Thesis subjects should be selected not later than the middle of the first semester. The completed work must be handed in two weeks before the close of college.

## FEES AND EXPENSES

**Tuition Fees.** The tuition fee for each year is \$100. The payment of this fee entitles the purchaser to one continuous course of lectures and laboratory instruction in all departments.

**Laboratory Fees.** A laboratory fee of \$15.00 each year is charged for drugs, chemicals and other material consumed in the prescribed laboratory courses.

**Special Students** may, by permission of the faculty, take any part of the course at a tuition fee to be decided by the



Executive Committee. Medical students will find a systematic instruction in pharmacy an excellent foundation for a medical course. The instruction offered in this school of pharmacy will also give a working knowledge of chemistry to those interested in the engineering and metallurgical industries.

**Laboratory Deposit.** Chemical and pharmaceutical apparatus and supplies, together with microscopes and other implements required in the work of the course, are furnished by the College without expense to the student, but breakage or damage to apparatus must be paid for. For this reason each junior or senior student is required to deposit \$15.00 with the Secretary. This deposit, or such portion of it as is not required for the specified purpose, will be refunded at the close of the term.

**A Diploma Fee** of \$10.00 will be required.

**Payment of Fees.** All fees are to be paid at the beginning of the term. Where this is impossible, the laboratory deposit, the laboratory fee, and at least one-half of the tuition must be paid upon entering the class, the balance of the tuition fee to be secured by note to be paid sixty days from the date of matriculation. Non-payment of fees debars the student from the final examinations.

## GENERAL INFORMATION

**Suggestions to Prospective Students.** It would be to the advantage of students if they would matriculate, secure boarding places, and fulfill the entrance requirements, a few days in advance of the opening exercises, so that their studies may not be interrupted in the beginning of the college year.

**Board and Lodging.** Good board and lodging vary in prices from five to seven dollars per week. Furnished rooms, accommodating two students, cost from eight to twelve dollars per month. By forming boarding clubs, students may reduce the cost of board very considerably.

A list of desirable rooms and boarding places may be obtained by addressing the Young Men's and Young Women's Christian Association of Los Angeles or by inquiring at the offices of these organizations of the University in the College of Liberal Arts.

**Employment.** The course of lectures has been so arranged as to permit those who desire it to devote a portion of their time to employment. The Secretary will keep a register of

students seeking such employment, and will give every assistance possible in procuring it for them.

**Discipline and Good Order.** All students are expected to observe the principles of good conduct and order while attending the College, and plain infractions of the rules will be referred to the Executive Committee of the Faculty, with recommendation of reprimand, suspension, or expulsion.

**Athletics.** The Faculty encourages athletic sports for their value in developing the body, in furnishing a means of pleasant recreation and a source of social and ethical culture, and in cultivating the spirit of co-operative enterprise. One of the finest athletic fields in Southern California is on the campus, as well as a gymnasium completely equipped; while the mammoth athletic field at Exposition Park is but a short distance away and is open to the use of University students. Students in good standing in the College of Pharmacy are eligible to places on the football, baseball, and track teams of the University.

**Correspondence.** Address all inquiries and other communications to

THE COLLEGE OF PHARMACY,  
Thirty-fifth Street and University Avenue,  
Los Angeles

# THE COLLEGE OF MUSIC

## FOREWORD

The musical department of the University was founded thirty years ago. By a faithful adherence to high standards its faculty have brought it to a well recognized position in higher musical education. Its diplomas have all the prestige which comes from its long and successful career and the name of the University. Its graduates and former students are taking prominent places in the musical world all over the Southwest, both as teachers and performers.

Extended courses are offered in vocal culture, piano, organ, all theoretical subjects, violin, cello and other orchestral instruments, public school music, normal training, and eurhythmics. The end sought in every branch pursued by the student is such thoroughness as will give him a genuine accomplishment and true culture or insure him the mastery expected of a professional.

## ADVANTAGE OF COLLEGE STUDY

The general spirit of earnest study characteristic of an institution of higher learning such as the University has been found to react very beneficially on the student of music, who, too often, is inclined to superficiality. Breadth of character and liberal ideas are more surely attained in the atmosphere of general education than in that of specialized study.

Among the advantages of pursuing the study of music in an institution of collegiate rank and methods there may be mentioned the regular attendance at lessons required, the musical atmosphere created by the recitals, lectures and class work, the college spirit and good fellowship created by association with a body of earnest, wide-awake students of kindred subjects, the opportunity given for obtaining in class work, at very slight expense, the very best of training in the theoretical studies such as harmony, theory and history of music—studies which are essential to the well-grounded musician and which the private teacher cannot touch upon in the lesson hour.

## LOCATION

The college is now occupying its new quarters at 3201 South Figueroa Street, known as the Marble Homestead. This is located three blocks from the University and one

block north of the West Jefferson Street car line, on one of the most beautiful boulevards of the city. The picturesque and spacious grounds, covering an entire acre, include a tennis court, croquet grounds and shady nooks among the magnificent old trees, which offer delightful opportunities to students for relaxation and diversion. The building provides a large number of roomy and attractive studios, a recital hall, offices and rooms for practice, study and rest. The charming and artistic atmosphere of the surroundings and the splendid facilities for carrying on the work of the school afforded by this location make it an ideal home for the institution. A studio is also maintained at Blanchard Hall.

### THE COURSE OF STUDY

The educational system of the school is divided into three general departments: The Preparatory, the Normal or Collegiate and the Postgraduate.

No requirements are made for admission, but applicants should be prepared to perform one or two musical selections of different styles representative of their previous work.

All beginners are received in the preparatory department, whether they plan for the regular advanced courses or merely desire the best of training during the time they devote to the study.

The Normal or Collegiate department is designed for students preparing for the profession as teachers and artists and for amateurs desirous of obtaining a thorough training in the art and science of music.

Students are required before graduation to have sufficient credits for entrance to the freshman class in college and 50 credits in the College of Music, according to the following outline:

	Credits.
Harmony—4 semesters .....	8
Theory—2 semesters .....	4
Ear Training—2 semesters.....	4
History of Music—2 semesters.....	4
Counterpoint—1 semester .....	2
Major Study (Instrumental or voice)—	
For completion of preparatory course.....	8
For completion of Normal course.....	8
For Senior recital.....	4
For Recital attendance.....	4
Credits required of all graduates.....	46

Electives required according to major subject—

For Piano students, Piano Normal—2 semesters.....	4
For Organ students, advanced counterpoint—1 semester	2
Keyboard Harmony—1 semester....	2
For Vocal students, piano—2 semesters.....	4
For Violin students, Orchestra practice—2 semesters.....	2
Music Appreciation—1 semester.....	2
Total required credits.....	50

The Senior recital required is to comprise a memorized program of standard works, one hour in length.

The credits for recital attendance are given in full only for a record of 75 per cent of all recitals held during pupil's course. Any deficiency in these four credits may be made up by substitution of some regular study.

The requirements are stated in terms of work accomplished rather than time spent, which must necessarily differ greatly according to differing abilities. The average student with fair aptitude by faithful work should cover the ground in about two years for each course, or four years in all.

All regular students working for graduation are expected to take two lessons a week unless excused by the faculty.

No regular postgraduate course is offered nor are diplomas given for this work, which is entirely in the line of private lessons. No higher testimony can be offered to the efficiency and popularity of our work than the fact that many of our students return for years of subsequent study.

### ADVANCED CREDITS

Students applying for advanced credits will be received conditionally into such classes as their instructors may direct, but such credits cannot be applied on their classification until after one semester's work. Enrollment in the school for at least one year is required of all graduates.

### DIPLOMAS

Graduation is given only for the completion of the course in at least two departments, one of which must be that of Theory. The diploma of the University is given at the completion of the Normal or Collegiate course, upon recommendation of the faculty; but the college does not guarantee a diploma, certificate or degree to any student, although the prescribed courses may have been satisfactorily completed. These honors are only given to those who have attained a



standard which, in the judgment of the faculty, assures a worthy representation of the college.

### TEACHER'S CERTIFICATES

Teacher's Certificates will be given to those who have completed the work of the Normal course, but who for any reason are unable to give the public recital required for graduation. They will, however, be required to give before the faculty a program of a somewhat less exacting nature than that required for the diploma.

### BACHELOR OF MUSIC

The requirements for this degree are as follows:

	Credits
Full graduation with diploma.....	50
One year's full work in the College of Liberal Arts.....	30
Graduation in a second branch of applied music—	
Preparatory, 8; Normal, 8; Elective, 4; Recital, 4; total....	24
Or Composition course as follows:	
Composition, 4 semesters.....	8 credits
Advanced counterpoint, 1 semester.....	8 credits
Canon and Fugue, 1 semester.....	2 credits
Instrumentation, 2 semesters.....	4 credits
Original cantata or work for orchestra, 20 minutes in length .....	8 credits
	24
Total .....	104

The college work required is to be elected from the following subjects: Education, Psychology, Modern Language, History, English Composition, English Literature.

### CREDITS IN THE COLLEGE OF LIBERAL ARTS

To students who have met the full college-entrance requirements, credit will be given in the College of Liberal Arts for musical work as follows: Two semester units will be credited to students making a passing grade in any one of the theoretical studies or in advanced vocal or instrumental work, the total number of credits in the College of Music thus granted not, in any case, to exceed fifteen of the entire 120 units required for the degree of Bachelor of Arts.

College students applying for credits for music work done elsewhere will be required to take one semester's work in one subject offered by the College of Music before such credits can be granted.

## DEPARTMENT OF EURHYTHMICS

The Eurhythmics of Jaques Dalcroze is now a department of the school work under Miss Marion Kappes, who acquired the system from its author in Dresden. The object of this system is to develop rhythmic sensation. Through rhythm it cultivates mind and body, strengthens the nervous system, develops concentration, the ear, and self expression. The course is especially recommended to those who are at all deficient in rhythmical sense and also as a means for physical culture.

### Piano Study for Children

A course based upon the most modern ideas of musical development.

The child is taught to feel, hear, think, and express himself through many forms of study which are a delight, yet always instructive.

**Class Work** combined with the private lesson gives opportunity for ear training, rhythm drills, and elementary harmony. The pupil acquires greater alertness and confidence through friendly rivalry and the experience of playing before others.

From the first original work is encouraged and carefully guided along the line of greatest value to the individual.

One half the class period is devoted to Eurhythmics.

## ANAHEIM DIVISION

A branch of the College of Music is maintained at Anaheim in a centrally located studio under the direction of Miss Trowbridge.

Courses are offered in piano, voice and violin.

Mr. Harold Walberg, member of the Los Angeles Symphony Orchestra, and well established as a teacher and soloist, has charge of the violin pupils and has given excellent proof of his ability through the playing of his pupils on the programs given quarterly.

Miss Lillian Backstrand has charge of the vocal work and has represented the school on local programs.

## BUSINESS REGULATIONS

The work of the academic year is divided into four ten week terms, beginning respectively on September 10 and November 19, 1917, and February 4 and April 15, 1918.

Students must register and secure entrance cards before they begin their lessons. A student may register at the beginning of the term or for the unexpired portion thereof. The entrance card must be presented to the instructor at the first lesson. No deduction will be made for absence from the first two lessons.

The work of the term begins on the date advertised, and students who enter late will find themselves behind their classes.

**Terms:** Tuition is payable strictly in advance at the beginning of each term.

Limited credit is sometimes allowed where satisfactory references are given. Application for credit must be made to the management through the office.

## FEES AND EXPENSES

### Total Expenses by the Ten-Week Term (Four terms per year)

#### Piano or Organ—Mr. Skeele.

45 minutes, once a week, \$30.00; twice a week, \$60.00.

30 minutes, once a week, \$25.00; twice a week, \$50.00.

#### Piano—Miss Trowbridge.

45 minutes, once a week, \$25.00; twice a week, \$50.00.

30 minutes, once a week, \$20.00; twice a week, \$40.00.

#### Piano Normal—Miss Trowbridge.

45 minutes, class, twice a week, \$10.00.

Interpretation class, once a week, \$5.00.

#### Piano Study for Children—Miss Trowbridge.

One class and one private lesson per week, \$20.00.

#### Piano—Miss Lennox.

45 minutes, once a week, \$12.50; twice a week, \$25.00.

#### Theory, Harmony or History—Mr. Pemberton.

45 minutes, once a week, \$15.00; twice a week, \$30.00.

45 minutes, class, twice a week, \$10.00.

#### Violin—Mr. Pemberton.

1 hour, once a week, \$25.00; twice a week, \$50.00.

#### Violin—Mr. Perry.

1 hour, once a week, \$30.00; twice a week, \$60.00.

30 minutes, once a week, \$20.00; twice a week, \$40.00.

**Cello—Mr. Bright.**

45 minutes, once a week, \$30.00; twice a week, \$60.00.

30 minutes, once a week, \$20.00; twice a week, \$40.00.

**Vocal—Mrs. Robbins or Mr. Cogswell.**

30 minutes, once a week, \$35.00; twice a week, \$60.00.

**Vocal Class—Mrs. Robbins.**

1 hour, once a week, \$10.00 (4 in a class).

Ensemble Club, once a week, \$3.00.

**Vocal—Miss Backstrand.**

30 minutes, once a week, \$15.00; twice a week, \$30.00.

**Flute—Mr. Mead.**

45 minutes, once a week, \$15.00; twice a week, \$30.00.

**Clarinet—Mr. Koslowski.**

1 hour, once a week, \$15.00; twice a week, \$30.00.

**Public School Music—Miss Chute.**

(Ear Training, Sight Singing, Appreciation, Methods, Materials, or Conducting.)

1 hour, once a week, \$15.00; twice a week, \$30.00.

45 minutes, class, twice a week, \$8.00.

**Dalcroze Eurhythmics (Classes)—Miss Kappes.**

Adults, once a week, \$12.00; twice a week, \$20.00.

Children, once a week, \$8.00; twice a week, \$15.00.

Special rates to students enrolled in other musical work.

Rental of Pipe Organ, one hour each day.....\$12.00

Piano rental, one hour each day..... 2.50

Incidental fee ..... .25

Fee for Diploma, Certificate or Degree..... 10.00

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

For courses of study and further particulars send for special booklet; address

THE REGISTRAR, COLLEGE OF MUSIC

3201 South Figueroa Street,

Los Angeles.

Phones: Home, 24654; Sunset, South 3423.

# COLLEGE OF ORATORY

The system used in the College of Oratory is based upon the Cumnock Method, founded by Robert McLean Cumnock, L.H.D., Director of the School of Oratory, Northwestern University, Evanston, Illinois.

The aims of the College are: 1. To develop the inner self. To prepare the body to express the inner self. The method is neither imitative nor mechanical, but is founded upon psychological principles. The pupil acquires the power to interpret for himself and to express emotions through his own individuality. The result is naturalness and simplicity of manner, together with personal power.

A great deal of attention is paid to the Department of Public Speaking. Ministers, theological students, or any who may have occasion to address audiences, will find this work of great value.

The Calendar of the College of Oratory is the same as that of the College of Liberal Arts.

## Credit in the College of Liberal Arts

A student in the College of Liberal Arts may elect a maximum of fifteen hours in the College of Oratory. (See Liberal Arts.)

# COURSES OF INSTRUCTION

## CLASS WORK

**Fundamentals of Common Reading:** Diction; consideration of the technique of intelligent reading; enlargement of vocabulary; correction of mannerisms. Two hours, both semesters.

**Voice Building:** Relaxation, breathing, tone placement, resonance, rhythm, phrasing, melody; development of purity, strength, quality and control of tone. Two hours, both semesters.

**Advanced Voice:** The continuation of the technique of voice building with an application to interpretation. Two hours, both semesters.



**Speech and Action:** The course is given to stimulate the imagination, and to establish responsive action of the body as the natural result of thought. Two hours, both semesters.

**Public Speaking:** The consideration and delivery of the various forms of public address, with platform exercises throughout the course. Rapid formulation of thought and its effective presentation is acquired. Two hours, second semester.

**Argumentation and Debate:** A practical and theoretical training in the method of arguments; brief drawing; practice debate. Two hours, first semester.

**Normal Training:** Discussion of the methods and problems of teaching oral English and Interpretation. Preparation and presentation of model lessons, departmental organization, arrangement of curriculum. (Open to Seniors only.) One hour, both semesters.

**Repertoire:** Abridgment of the short story, the poem, the novel and the drama, for public presentation. One hour, both semesters.

**Modern Poets and Prose Writers:** The purpose of this course is to become acquainted with the writers of the day by the way of interpretation, not by dissection. A comprehensive survey is made of the life, writings, and style of each writer. Two hours, both semesters.

**Shakespeare:** Plays are considered with reference to the vocal interpretation. Two units, both semesters.

**Story-Telling:** Analysis and classification of typical stories in literature and history, with actual practice in story-telling. The work is designed to meet the needs of student, teacher, librarian and mother. One hour, both semesters.

**Art of Interpretation:** An assembly of students for the discussion of the art principles involved in the public presentation of Literature.

- a. A general survey of the various forms of literature.
- b. The classic poets.
- c. Bible and hymn reading.
- d. Modern drama.

Two hours, both semesters for two years.

**Dramatic Club:** Interpretation and presentation of the drama; practical instruction in staging plays; a study of dramatic law. Two hours, both semesters.

**Individual Instruction.** Every pupil registered for the Full Course in Expression receives Thirty-two Private Lessons in Reading during the year, without extra charge, in addition to the class work. All private work is taken with the regular teaching staff.

### CONDITIONS OF ADMISSION

A student upon entering the Diploma Course must be a graduate of an accredited high school or academy.

Entrance to the Reader's Course does not require one to be a graduate of any school, but the work is planned to meet the needs of those who wish to complete a prescribed course in Expression.

### REQUIREMENTS FOR GRADUATION

**\*Diploma Course.** The work required in this course consists of: Four years of private work, one lesson per week; completion of all of the courses; one year of Indoor and of Outdoor Physical Training; and two years (sixty units) of work completed in the College of Liberal Arts, such work to be approved by the Faculty of the College of Oratory.

**Reader's Course.** This is a cultural course and requires the completion of two years of private work, one lesson per week; courses 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13; one class each semester of prescribed work in the College of Liberal Arts. In addition, a student may elect one or more of the remaining courses in the College of Oratory.

The College of Oratory does not guarantee a Diploma to a student, even upon the completion of the prescribed courses required for graduation. Every candidate for graduation must have attained a standard, approved by the Faculty, as an exponent of the Art of Interpretation.

### RECITALS

Pupils' recitals are given every week on Wednesday at 3:00 p. m. in Athena Literary Hall. The participation in these recitals by students is required that the student may have practice and gain confidence in appearing before audiences. All students enrolled in the school are expected to be present at each recital.

\*This course is designed to meet the requirements of the State Board of Education for a Teacher's Certificate.

## PHYSICAL EXPRESSION

"Is not that the best education which gives to the mind and to the body all the force, all the beauty and all the perfection of which they are capable?"—Plato.

Special classes in Physical Culture are conducted for the Oratory students. The laws which underlie Physical Expression are here studied and such exercises are given as will best develop the pupil toward health, expressiveness of movement and grace. It is the aim of this work to bring the body under perfect control of the will, and to teach the principles of gesture in such a manner as to give spontaneity and freedom from affectation.

## SUMMER SESSION

The College of Oratory offers both private and class work during the summer session of six weeks. The work completed will be given credit in the College of Oratory, and also in the accredited courses of the College of Liberal Arts and College of Law.

## SATURDAY INSTRUCTION

Special classes offered Saturday morning by the College of Oratory are planned to meet the needs of teachers particularly. Courses in the Art of Speech and Diction, Public Speaking, and Story-Telling, will be offered and credit given in the College of Liberal Arts for work completed. Individual instruction also is offered for those desiring the work.

## FEES AND EXPENSES

Fees are payable at the office of College of Oratory.

Class instruction, per semester, 18 weeks.

Private instruction, per semester, 16 weeks.

Delinquent payments involve an increase of fifty cents per month.

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

Registration fee, per semester (not refundable).....	\$ 3.00
Full Diploma Course, per semester.....	75.00
Full Reader's Course, per semester.....	100.00
One private lesson per week (45 minutes).....	45.00
A course of ten lessons (45 minutes).....	28.50
Two private lessons per week (30 minutes).....	58.00
One private lesson per week (30 minutes).....	32.00

A course of ten lessons (30 minutes).....	22.50
Single lessons (30 minutes).....	\$2.25 to 2.75
Single lessons (45 minutes).....	\$3.00 to 3.50
Class, two periods per week (55 minutes).....	10.00
Coaching Plays (60 minutes) .....	3.50
Coaching Debate (60 minutes).....	5.00

Special rates given to students entering University contests.

Rates for private instruction with the Dean to those outside of the College of Oratory will be quoted upon application.

Diploma Fee .....	\$10.00
Reader's Fee .....	5.00

The graduation fee is payable 30 days in advance.

Send for a catalogue of the College of Oratory. Address

BEULAH WRIGHT, Dean,  
The College of Oratory,  
University of Southern California,  
Thirty-fifth Street and University Avenue,  
Los Angeles

# THE COLLEGE OF FINE ARTS

## OUR AIM

The value of a school can only be measured by its efficiency. The success of the graduates of this college in the public and private schools and studios of California and Eastern cities is ample testimony to the efficiency of our methods.

The college motto, "ONLY THE BEST IS WORTH WHILE," is a compelling incentive and nothing will be spared at any time in our efforts to make the College of Fine Arts, U. S. C., the best in this country, ideal in every respect.

## LOCATION AND EQUIPMENT

The special advantages of this school are many. The College of Fine Arts of the University of Southern California is situated on a cliff overlooking an unspoiled natural park, the famed Arroyo Seco, with a perennial stream and groves of magnificent trees, rocky cliffs and acres of boulders, wide stretches of oak-dotted sward, and the eternal snow-capped mountains closing every vista. Near at hand are mountain canyons, sandy beaches, rocky promontories, and an unparalleled variety of race and costume for models. Probably no spot in the world of the same area offers more variety or greater abundance of paintable material, and the ideal climate permits of outdoor work almost continuously.

The buildings are handsome and commodious. There are nine large, well-lighted and well-ventilated studios; a picture gallery; an assembly room with piano; a reception room; cloak rooms and dormitories with every possible convenience. Every room is perfectly furnished for its purpose. There is an abundant equipment of sculpture, casts, designs in architecture, pottery, metal, jewelry, etc. The library contains all the standard art magazines and many volumes upon art subjects. There are also ample grounds for recreation and outdoor study.

The curriculum embraces every department of graphic and plastic art that can be learned from teachers or books. This fullness of curriculum and the constant supervision of each department of work by expert teachers, giving instruction that is largely individual, insure that the student will have a thorough grounding in the fundamental principles of art, and



## THE FORWARD MOVEMENT

that the graduate will know all that an intelligent and cultured artist or teacher should know. Further, the concentrating of the third year's work on the chosen specialty insures that the students will leave college well equipped to enter the ranks of workers with assurance of success. The courses are full to the brim with interesting and varied work. No student who once enters the spirit of this school can fail to catch the enthusiasm which makes a joy of one's occupation and is the surest guarantee of success.

The rapid and revolutionary changes now taking place in business methods, in manufacturing, in advertising, in house decorating, in design all require that the teaching of commercial art must change with the times. When novelty is valued, more than tradition, it is necessary to be up-to-date and down-to-the-minute.

The purpose of the College of Fine Arts is to present to the student a practical twentieth century curriculum and teaching method embodying all that makes for efficiency with all the newest ideas and all based on a sound academic training of the eye, the hand and the imagination.

These things make for success and they make for stability. Competition in all lines is becoming keener every year as colleges are turning out graduates in increasing numbers. Trained specialists are taking the best places and supplanting the inefficient workers and teachers of yesterday. The cry that the professions are overcrowded is only true in the sense that they are overcrowded with incompetents.

## THE COURSES

**Entrance Requirements for the Teachers' Course and the Courses Leading to Degrees.** Fifteen units of high school work, uniform with requirements for admission to the College of Liberal Arts.

**Advanced Standing.** Credits for work done in other art schools will be allowed when satisfactory proficiency is shown.

Students may register for special branches to be taken separately. In such cases certificates of proficiency are granted on the student's passing the require examinations. Students in special branches may enter the school at any time without examination.

## PAINTERS' COURSE

(Four Years)

(Leading to the Degree of Bachelor of Fine Arts)

**First Year.** Charcoal drawing from the cast; clay modeling; pencil drawing from landscape; mechanical drawing, including geometry, perspective and projection; art history and mythology.

**Second Year.** Composition and drawing from life of draped and nude figure, portraiture, landscape; anatomy, modeling; water color; art history, sacred history; applied design, pottery, wood carving, metal work; German or French.

**Third Year.** Painting in water color and oil from life and landscape; pen and wash drawings; composition; modeling, composition and design; normal teaching course; German or French.

**Fourth Year.** Specializing in the chosen line in painting or sculpture.

## ARCHITECTURAL COURSE

(Four Years)

(Leading to the Degree of B.S. in Architecture)

**First Year.** Mathematics, including college trigonometry and algebra and plane analytical geometry; college physics; English; freehand drawing; mechanical drawing; shades and shadows; and elements of architecture.

**Second Year.** Differential and integral calculus; German or French; drawing from life; descriptive geometry; perspective; materials of construction; history of architecture; working drawings and detailing; and elementary architectural design.

**Third Year.** Mechanics and strength of materials; graphic statics; structural design; water color; pen and ink rendering; building illumination and acoustics; sanitation; history of architecture; history of ornament; and intermediate architectural design.

**Fourth Year.** Clay modeling; structural design; reinforced concrete; heating and ventilating; advanced architectural design; professional relations, and thesis.

For full description of this work see **Architecture**, College of Liberal Arts.

**TEACHERS' COURSE**

(Three Years)

(Leading to a Diploma)

Identical with the first three years of the Degree Course, except that the requirement of French or German is omitted.

**ILLUSTRATING COURSE**

(Three Years)

(Leading to a Diploma)

**First and Second Years.** As in painter's course.

**Third Year.** Painting in water and oil, pen and wash drawing, caricature, cartooning and composition.

**DESIGN COURSE**

(Three Years)

(Leading to a Diploma)

**First Year.** Free hand and mechanical drawing, original design, art history, mythology.

**Second Year.** Composition, color harmony, original design, anatomy.

**Third Year.** Historic ornament, fabrics, interior decorating, applied design.

**SCULPTURE**

(Three Years)

(Leading to a Diploma)

**First Year.** As in painters' course.

**Second Year.** Modeling from life, draped and nude; portraiture; anatomy; mythology; the history of art.

**Third Year.** Composition and grouping; modeling from life; casting in plaster and metal; anatomy; historic monuments.

## SPECIAL COURSES

**Commercial Art.** Advertising, design, poster painting, lettering, card writing.

**Normal Art Course.** Practical work in all the art branches taught in grade schools, as object drawing in pencil, charcoal and wash, silhouettes, stenciling, cardboard modeling, colored chalks, harmony, design, etc.

**Metal Work, Brass and Iron.** Hammer work, etching, chasing, piercing, mould making, casting, forging and enameling.

**Landscape Painting.** Drawing and painting from nature, along the lines of the Woodstock school.

**Jewelry.** Wire and band work, casting, chasing, jewel setting, enameling, and design.

**Wood Carving.** Design, the selection of woods, and the technic of carving, incising, bas-relief, and the round.

**Pottery.** Clay modeling, the potter's wheel, moulding, glazing, firing, underglaze painting, harmony, and design.

**Mural Painting.** Drawing, water color and oil painting, color harmony, composition, and practical application.

**Interior Decorating.** Drawing, design, color harmony, composition and the nature and uses of materials.

**Art Glass.** This includes design, hard-metal mounting, leading, cutting, color harmony, painting on glass, and firing.

Transient students may take any parts of courses as special studies.

## SUMMER SCHOOL

A summer school is maintained, beginning about July 1st of each year. All branches of fine and applied art are taught, the fees being about the same per month as in the full course. Special circulars will be mailed on application.

## PRIZES

A gold medal is awarded to the student making the best record for the year.

A scholarship for one year is awarded to the member of the graduating class making the best record.

Frequent competitions are open to advanced students, entitling the winners to certain school privileges.

**FEES AND EXPENSES**

(All-day lessons; hours 9 a. m. to 12 m.; 1 p. m. to 4 p. m.)

Full Collegiate Course .....	\$95.00
Collegiate Semester .....	50.00
Per month, six days per week.....	15.00
Per month, three days per week.....	7.50
Per month, one day per week.....	4.50
Single lessons, each.....	2.00
Laboratory fee for Crafts, per term.....	1.00
Graduation fee .....	5.00

**SPECIAL BRANCHES**

(When taken separately from courses)

Landscape, per month, one day per week.....	\$6.00
Commercial Art, per month, one day per week.....	6.00
Pottery .....	4.50
Metal and Jewelry, per month, one day per week.....	6.00
Art Glass .....	4.50

**REMARKS**

All fees payable in advance.

There are three lectures per week on anatomy and other art subjects free to all enrolled students, with occasional lectures by noted teachers and artists.

No charge is made for models, lockers, boards, easels, etc.

Materials are furnished to students at the lowest rates.

The school dormitories are equipped with every comfort and convenience, including facilities for light housekeeping.

Board and lodging may be had near the school at reasonable rates.

The picture gallery is open to the public afternoons.



# THE UNIVERSITY HIGH SCHOOL

The University High School, a standard high school for a limited number of students, is maintained in connection with the Department of Education of the College of Liberal Arts in the University of Southern California. It is located on the campus of the College of Liberal Arts at West Thirty-fifth Street and University Avenue in the city of Los Angeles. The campus can be reached conveniently from the center of the city by either the University or West Jefferson Street cars.

The School uses for recitation purposes some of the lecture rooms of the College of Liberal Arts. The library, museums, laboratories, gymnasium, and athletic equipment of the college are at the disposal of the high school students. A detailed description of this equipment will be found under the heading of General Information in the portion of the Year Book devoted to the College of Liberal Arts.

Instruction in the University High School is given under the direct supervision of a corps of experienced teachers. Instructors in the various classes hold the degree of Bachelor of Arts, or its equivalent, and devote themselves to the presentation of the academic subjects in which they have specialized. The limiting of the enrollment in the High School to 150 makes possible classes of moderate size and considerable personal attention to individual students.

The immediate aim of the High School is to prepare its students for entrance to the various colleges of the University. The curriculum, however, provides a liberal high school education for those students who may not be able to attend higher institutions of learning. The needs of students desiring to take special courses will receive careful attention.

## GENERAL SCHOOL ORGANIZATION

**The School Year:** The school year consists of thirty-six weeks, extending, for the year 1917-1918, from September 13 to June 5, and is divided into two terms, or semesters. Recesses are indicated on the University High School Calendar.

**The School Day:** The school day begins at 8:00 a. m. and continues until 4:00 p. m., with an intermission of forty-five minutes from 12:30 p. m. to 1:15 p. m. for luncheon. Attend-

ance of all pupils is required from 8:55 a. m. to 3:00 p. m. Variations from this rule must be approved by the principal.

**The School Period:** Periods are fifty minutes in length, with five-minute intervals between periods. Periods free from recitation or laboratory engagements are devoted to study in assigned rooms.

**Assembly:** Three periods a week are used for general assemblies and chapel exercises. Attendance of all pupils is required.

**Attendance:** Regular and punctual attendance at all school appointments indicated on the pupil's study-card is required. Absences must be excused at the principal's office before attendance is resumed. Pupils living at home are required to present written excuses for absences signed by parents or guardians. Boarding pupils must give verbal excuses to the principal. Work lost by reason of absences must be made up.

**Athletics:** In addition to systematic gymnasium instruction, the University High School provides opportunities for participation in various school sports, such as football, basketball, track, baseball, and tennis. These sports are supervised by competent directors and managers. Eligibility for participation in interscholastic contests is determined by the rules of the Southern California Interscholastic Athletic League, of which the University High School is a member.

**Social Activities:** The only social organizations recognized by the school authorities are the four regular classes and the student body itself. Occasional parties and picnics add to the enjoyment of the life of the school and serve to develop the social natures of the pupils.

**Societies and Clubs:** Organizations having definite educational value are encouraged and fostered by the school authorities. Secret societies have no official standing, and membership of a pupil of the High School in a secret society may be deemed sufficient cause for his removal from the school.

**Discipline:** Inasmuch as the University High School aims to develop in its pupils individual responsibility for personal conduct, few formal rules of conduct are laid down. The highest social standards of conduct are expected to govern the relations between students and between students and instructors. Failure on the part of a student to comply with these standards may make it advisable for him to withdraw his membership from the school.

## ADMISSION

Application for admission to the University High School may be made in personal consultation with the principal, or by correspondence. The applicant must be able to prove preparation equivalent to that required for entrance to a regular state high school and to give references for good moral character.

Applications should be addressed to The Principal of the High School, University of Southern California, Los Angeles.

## REGISTRATION

On or before the appointed registration days in September and February, each student must register at the office of the principal. After consultation with representatives of the registration committee concerning courses of study, each student will receive a study-card and an enrollment-card, upon which will be entered the subjects desired for the semester. The study card will be for the guidance of the student. The enrollment card must be filed with the Treasurer of the University when registration fee is paid.

## COURSES OF STUDY

The following groups of courses are offered in the High School:

- |             |                          |
|-------------|--------------------------|
| Group I.    | English.                 |
| Group II.   | Foreign Language.        |
|             | (a) French.              |
|             | (b) German.              |
|             | (c) Greek.               |
|             | (d) Latin.               |
|             | (e) Spanish.             |
| Group III.  | History.                 |
| Group IV.   | Mathematics.             |
| Group V.    | Science.                 |
| Group VI.   | Economics and Sociology. |
| Group VII.  | Art and Drawing.         |
| Group VIII. | Physical Education.      |

The principal and vice-principal will endeavor to organize for each student a definite four-year course of study suited to the needs and aims of the individual student. The following considerations will govern the selection of the student's course:

- (1) Requirements for graduation from the University High School.
- (2) Requirements for entrance to the college for which the student is preparing.
- (3) The principle of distribution: The student will be required to form some acquaintance with the major fields of knowledge as represented in the eight groups above.
- (4) Sequential study: The student will be required to follow the courses of at least one of the above groups (I to VII inclusive) throughout his high school course.

### REQUIREMENTS FOR GRADUATION

A diploma of graduation will be granted to each student who completes fifteen units of the courses described on the following pages; provided, that the fifteen units be made up as follows:

English .....	2 units
A Foreign Language .....	2 units
A Laboratory Science .....	1 unit
Algebra and Plane Geometry.....	2 units
United States History and Civics.....	1 unit
Electives .....	7 units

and provided that the student has been in attendance at the University High School for at least two semesters preceding the completion of the work described above.

### REQUIREMENTS FOR ENTRANCE TO THE COLLEGES OF THE UNIVERSITY

#### The College of Liberal Arts:

- (a) The Bachelor of Arts Course: Same as requirements for graduation from the University High School.
- (b) The Engineering Courses (Architectural, Civil, Electrical, Mining and Chemical).

English .....	2
A modern language .....	2
Chemistry .....	1
Physics .....	1
Elementary Algebra .....	1
Advanced Algebra .....	1
Plane Geometry .....	1
Solid Geometry .....	$\frac{1}{2}$
Trigonometry .....	$\frac{1}{2}$
U. S. History and Civics.....	1
Freehand Drawing .....	1
Mechanical Drawing .....	1
Electives .....	2

**The College of Physicians and Surgeons:** Two full years in the College of Liberal Arts in addition to the following high school courses:

English .....	2
Algebra .....	1
Plane Geometry .....	1
German, or French .....	2
U. S. History and Civics.....	1
Electives .....	8

**The College of Law:** Graduation from an accredited high school.

**The College of Dentistry:** Graduation from an accredited high school.

**The College of Theology:**

- (a) **The Degree Course:** This course is for students who have obtained the Bachelor of Arts degree.
- (b) **The Diploma Course:** This course is for students who have the equivalent of Junior standing in the College of Liberal Arts.

**The College of Pharmacy:** The minimum requirement for entrance is eight units of high school work.

**The College of Oratory:**

- (a) **The Diploma Course:** Graduation from an accredited high school.
- (b) **Special Course:** Confer with the dean of the College of Oratory concerning entrance.

**The College of Music:**

- (a) **The Diploma Course:** Graduation from an accredited high school is required for graduation from the College of Music. No entrance requirements.
- (b) **Special Course.** Confer with the dean of the College of Music concerning entrance.

**The College of Fine Arts:**

- (a) **The Teachers' Course,** and courses leading to degrees: Graduation from an accredited high school.
- (b) **Special Course:** Confer with the dean of the College of Fine Arts concerning entrance.

## FEES AND EXPENSES

Registration Fee, a year, payable in advance.....\$10.00

(The registration fee is not refundable.)

Diploma Fee, payable 30 days before graduation..... 5.00

**Laboratory Fees, a semester:**

Biology (each course requiring laboratory work).....	4.00
Chemistry .....	5.00
Physics .....	4.00

Students in Chemistry will deposit a breakage fee of \$5.00 which, less the cost, or the cost of the broken goods having been deducted, will be refunded at the close of the year.

Room and board (except luncheon Monday to Friday) in the Women's Hall, one hundred and seven dollars (\$107.00) a



semester, payable in advance. A cash deposit of five dollars (\$5.00) is required for the reservation of a room. Pupils are expected to furnish their own bed-linen.

The University reserves the right to change any of the rates or discounts printed in this year book without notice.

## ROOMS AND BOARD

Students are required to submit to the Faculty a statement of the places where they desire to room and board, and must secure the consent of the Faculty in each case.

Board and furnished rooms can be secured in private families at from five dollars to seven dollars a week. Furnished rooms accommodating two students cost from eight to twelve dollars a month.

Other expenses incident to school life vary with the habits and circumstances of the student. They are not, of necessity, so great as to be burdensome to persons in moderate circumstances. The instances have been extremely rare in which students of good ability and health have been compelled to leave the school for want of money.

## COURSES OF STUDY

### GROUP I: ENGLISH

It is axiomatic that every one, for the sake of cultivating a consistent habit of thinking, should be taught how to write bits of accurate description and simple narrative; how to use the common methods of exposition, and how to organize in logical sequence the parts of an argumentative discourse.

It is also true that, while one may become a respectable essayist, and some may be called upon to write occasional paragraphs for public print, all must needs exhibit their command of English in daily conversation, and in casual business and social correspondence.

From these considerations we are led to conclude that knowledge of pronunciation is of more worth than skill in punctuation, and good form in public speech, more to be desired than style in written discourse.

The program, therefore, for the four-year course in English, defining the material and methods of instruction, has been organized with due regard for the immediate needs and interests of individual students.

### Method

Among other important items the method of instruction will involve the following list of particulars:

An effort on the part of instructors to create real situations as a basis for real motives for effort in speaking and writing.

Special attention given to lessons in spelling, grammar, and the pronunciation of selected lists of words.

Practice in the formal analysis of sentences, and in the construction of typical sentences and paragraphs.

The student's constructive imagination to be guided by the simple formula upon which all objects in nature and art are constructed: purpose, plan, material, and method.

### Literature

The following literary masterpieces for reading or intensive study include prose fiction, biography, ancient classics in translation, essays, drama, orations and arguments, selections from American and English poetry. In class discussion stress is laid upon the thought and emotional content, with some attention to form and the aesthetical element.

**First Year. First Semester.** (1) "American Stories"—The Hawthorne Classics. (2) Scott's "Marmion." (3) Parkman's "The Oregon Trail." **Second Semester.** (1) "Old Testament Stories." (2) Irving's "The Alhambra." (3) Macaulay's "The Lays of Ancient Rome."

**Second Year. First Semester.** (1) "Three Narrative Poems:" The Ancient Mariner, Sohrab and Rustum, Enoch Arden. (2) "The Classic Myths." (3) Shakespeare's "Merchant of Venice." **Second Semester.** (1) Law's "Selections from American Poetry." (2) Lincoln's "Inaugurals and Addresses." (3) Dana's "Two Years Before the Mast."

**Third Year. First Semester.** (1) Carlyle's "Essay on Burns." (2) Tennyson's "Idylls of the King," (three). (3) Addison's "The Sir Roger de Coverley Papers." **Second Semester.** (1) Shakespeare's "Macbeth." (2) Pace's "American Literature with Readings."

**Fourth Year. First Semester.** (1) Milton's "Paradise Lost," Books I, II. (2) Macaulay's Essay on Milton. (3) Washington's "Farewell Address." (4) Webster's "First Bunker Hill Oration." **Second Semester.** (1) Long's English Literature and "Selections from English Poetry." (2) Shakespeare's "The Tempest."

### Oral English

**First Year. First Semester.** Principles of voice building: breathing, relaxation, and tone placement. Phonetics. Enunciation. Beginning of common reading. **Second Semester.** Continuation of technique as in first semester. Interpretation of selections in "Cumnock Reader."

(Note: The course in First Year Oral English is required of all first year students.)

**Second Year. First Semester.** Continuation of technique and interpretative reading offered in First Year Oral English. Beginning of extemporaneous speaking: narrative, descriptive and biographical. Text: Cumnock's "Choice Readings." **Second Semester.** Talks on current public questions. Beginning of argumentation in extemporaneous speaking and debating.

## GROUP II: FOREIGN LANGUAGE

### (a) FRENCH

**First Year.** This course comprises a study of the essentials of French grammar, and reading from easy French, with especial attention given to pronunciation and to the use of simple, conversational phrases. Texts: Fraser and Squair's "Shorter French Course"; Talbot's "La Francais et la Patrie"; Weill's "Historical French Reader."

**Second Year.** This course includes a review and continuation of French grammar, with emphasis on the idiomatic usages of the language. Reading from various modern French authors is combined with composition and conversation. Texts: Fraser and Squair's "Shorter French Course"; Halevy's "L'abbe Constantin"; Dumas' "La Tulipe Noire."

### (b) GERMAN

**First Year.** The course in First Year German comprises studies in pronunciation, grammar, drill on the forms, elementary conversation, and various anecdotes and poems for translation and memorizing. Texts: Mosher and Jenney's "Lern und Lesebuch"; Spyri's "Moni der Geissbub."

**Second Year.** The grammar is finished and reviewed. Various modern German stories and poems are read and reproduced, both orally and in the form of written exercises. The class work is conducted mainly in German, and the

ability to read accurately and fluently and to express simple thoughts in spoken and written German is required. Texts: Mosher and Jenney's "Lern und Lesebuch"; Rosegger's "Der Lex von Gutenhag"; Schiller's "Der Neffe als Onkel"; Hauff's "Das Kalte Herz."

### (c) GREEK

Courses in Greek may be elected by third or fourth year students.

**First Year.** Elementary Greek. A thorough drill in forms and the simple principles of syntax, accompanied by the reading of simple Greek: Text: Burgess and Bonner's "Elementary Greek."

**Second Year.** Xenophon's Anabasis, Books I-IV. Practice in sight reading. Oral and written prose composition based on the text. Texts: Goodwin and White's "Xenophon's Anabasis"; Goodwin's "Greek Grammar"; Pearson's "Greek Prose Composition."

### (d) LATIN

**First Year.** The aim of the first year's work is to attain an accurate pronunciation, a thorough knowledge of forms and the simpler principles of syntax, and a vocabulary of about eight hundred common words. Text: Smith's "Latin Lessons."

**Second Year.** Selections from easy Latin prose, particularly Caesar's Gallic War. A thorough review of forms and a systematic study of syntax. Regular practice in oral or written translation into Latin, and in sight reading. Texts: Bennett's "Caesar's Gallic War"; Allen and Greenough's "Latin Grammar."

**Third Year.** Cicero, six orations. Oral or written prose composition based on the text. An attempt is made to gain some definite knowledge of Cicero and his Age, of the methods of government in Cicero's time, and of the city of Rome. Texts: D'Ooge's "Select Orations of Cicero"; D'Ooge's "Latin Composition"; Allen and Greenough's "Latin Grammar."

**Fourth Year.** Virgil's Aeneid, Books I-VI. A special effort is made to approach the work as poetry, and the reading of the Latin is duly emphasized. During the first semester two days each week are given to a review of syntax and to prose composition. Texts: Fairclough and Brown's "Virgil's Aeneid"; Allen and Greenough's "Latin Grammar."



**(c) SPANISH**

**First Year.** The aim of the first year's work is to attain an accurate pronunciation, a knowledge of the fundamentals of Spanish grammar, and the ability to converse in simple Spanish. Texts: "Worman's First Spanish Reader"; Harrison's "Elementary Spanish Reader"; Espinosa and Allen's "A Spanish Grammar."

**Second Year.** Advanced reading and short stories. Continuation of grammar and conversation. Texts: Hill's "Spanish Tales for Beginners"; Crawford's "Spanish Composition"; Carrion y Aza's "Zaragüeta"; Espinosa and Allen's "A Spanish Grammar."

**GROUP III: HISTORY**

In addition to the thorough study of the text-books, the work in History is supplemented by collateral reading and written reports on assigned topics. Practical use is made of the library reference books, atlases, and dictionaries. Map drawing and carefully kept note-books are required in all courses in this department.

**First Year. Ancient History.** Since Ancient History furnishes the student with the fundamental ideas for the proper understanding of additional historical study, it ought to be taken in the first or second year of his high school course.

**First Semester.** The Oriental Peoples and the Greeks.

**Second Semester.** The Romans and the Roman Empire through the reign of Constantine. Text: West's "The Ancient World."

**Second Year. Mediaeval and Modern History.** This course is open to all students who have completed Ancient History.

**First Semester.** From the "Dark Ages" to the "Discovery of America."

**Second Semester.** From the "Reformation" to the "Napoleonic Era." Text: Myer's "Mediaeval and Modern History."

**Third Year. English History.** This course is open to students registered in the third or fourth year. **First Semester.** To "The Reign of Elizabeth."

**Second Semester.** From "The Reign of Elizabeth" to "The Growth of Democracy." Text: Cheney's "A Short History of England."

**Fourth Year. United States History and Civics.** Primarily for students registered in the fourth year. **First Semester.**



Six parts of the text completed: From the "Establishment of the English" to "The Crisis of Disunion." Text: Muzzey's "American History." **Second Semester.** The text-book on civil government completed. Text: Forman's "The American Republic."

## GROUP IV: MATHEMATICS

The aim of the course in Mathematics is to cultivate the habits of independent reasoning, of accuracy of work, and of precision and clearness in the statement of conclusions and of the reasons upon which they depend. First in importance is the intellectual training that makes the mind a ready and keen tool; second, the orderly acquisition of facts. Absolute thoroughness and work that increases in amount and difficulty with the student's increasing capacity are required. The student's efficiency is measured by his power to do. Throughout the course written reviews and test examinations are frequent.

**First Year. Elementary Algebra.** The object of the study is not only to acquire a knowledge of the subjects required for admission to the leading universities, but to secure the mental discipline for its own sake, and such a drill as looks to the use of the algebraic method in future study. Special emphasis is placed on factoring and on the solution of equations. Text: Wentworth's "New School Algebra."

**Second Year. Advanced Algebra.** Elementary Algebra is reviewed thoroughly. A careful study is made of the following subjects: Theory of Quadratics, Simultaneous Quadratics, Progressions, Mathematical Induction, Binomial Theorem for Positive Integral Exponents, Inequalities, Variables and Limits, Imaginary and Complex Numbers, Determinants, Theory of Equations, Solution of Higher Equations, Logarithms. Text: Schultze's "Advanced Algebra."

**Third Year. Plane Geometry.** Careful attention is given to construction, to clear and logical expression, and above all to the attainment of the power to do original work in geometry. The exercises of the text-book are supplemented by constant suggestions by the teacher for investigations. Text: Wentworth's "Plane Geometry."

**Fourth Year. First Semester. Solid Geometry.** A study of the fundamental propositions of the Euclidean geometry of space. Text: Wentworth's "Plane and Solid Geometry."

**Second Semester. Trigonometry.** Plane trigonometry and its applications, the trigonometry of the right spherical triangle, and logarithms. Text: Palmer and Leigh's "Plane Trigonometry with Tables."

## GROUP V: SCIENCE

**First Year. General Science.** The course in General Science is intended primarily for first year students. It serves as an introduction to the particular sciences of the later years of the high school course. By means of recitations, experimental demonstrations and the study of the text the student is made familiar with the simple yet fundamental facts of the various sciences and is given a basis for the intelligent selection of a science to meet the science requirements for graduation. Text: Snyder's "First Year Science."

**Second Year. Botany.** An elementary study of plant life. The work in Botany is a combination of laboratory study, lectures, and recitations, with a careful notebook record of the work actually done by the student under the direction of the instructor. Text: Andrews' "Practical Course in Botany."

**Second Year. Zoology.** An elementary study of animal life. This work is a combination of laboratory study, lectures, occasional field trips, and recitations, with a careful notebook record of the work done by the student under the direction of the instructor. Texts: Linville and Kelly's "Text-Book of General Zoology"; Linville and Kelly's "A Guide for Laboratory and Field Work in Zoology."

**Third Year. Elementary Chemistry.** A study of the general principles, theoretical and practical, of inorganic chemistry. Recitations and individual laboratory work occupy not fewer than seven hours a week. The student is required to keep a complete record of the work done during the year. Texts: McPherson and Henderson's "First Course in Chemistry"; McPherson and Henderson's "Laboratory Exercises—Arranged to Accompany 'First Course.'"

**Fourth Year. Elementary Physics.** The course in Physics is designed to make the student familiar with the principal facts, laws, and theories of Physics. This is accomplished by the careful study of a text and by laboratory work. Texts: Carhart and Chute's "First Course in Physics"; Coleman's "Revised Laboratory Manual."

**GROUP VI: ECONOMICS AND SOCIOLOGY**

The courses outlined below are open to third and fourth year students only.

**Third Year. First Semester. Industrial History.** A study of the industrial history of the American people. This course includes such topics as General and Special Industries, Commerce and Money, Manufacturing, and Transportation. Text: Moore's "Industrial History of the American People." **Second Semester. Commercial Geography.** An elementary study of commercial conditions, topographic, climatic, etc., and a brief survey of the important commercial countries. Text: Adams' "A Commercial Geography."

**Fourth Year. First Semester. Economics.** This course includes such topics as Production, Consumption, Distribution of Wealth, the Theory of Exchange, Money and Credit, Monopolies, International Trade, and Governmental Revenues and Expenditures. Text: Bullock's "Introduction to the Study of Economics." **Second Semester. Sociology.** An introduction to the study of Sociology. A study of concrete sociological conditions with some attention to sociological theories. Text: Towne's "Social Progress."

**GROUP VII: ART AND DRAWING****Fine and Applied Art**

**Freehand Drawing. First Semester.** Elementary work in pencil and charcoal from geometrical solids and casts; still life in pastel. **Second semester.** Drawing from casts; still life in water color; out of door sketching in pencil and colors.

**Basketry.** The essentials of reed work, including the weaving of baskets and trays and the dyeing and finishing of reed baskets and furnishings; the weaving of baskets from native materials. ( $\frac{1}{2}$  unit for year's work.)

**Clay Modeling.** This course includes designing, building, decorating, glazing and firing pottery such as tiles, bowls, vases, jars, etc. Also modeling fragments of ornament from plaster casts.

**Drawing**

**Mechanical Drawing. First Semester.** The use and care of instruments; lettering; geometrical problems; simple ortho-

graphic projection; working drawings. **Second Semester.** Lettering; mathematical curves including conic sections; intersection and development of surfaces; isometric and oblique projection; simple perspective; working drawings.

**Machine Drawing.** Drawing of simple machine parts; free hand sketches; detail and assembly drawings of existing machinery; tracing and blue printing.

**Architectural Drawing.** Lettering; large scale details of the various elements of buildings; plans and elevations of a small dwelling house; elementary architectural rendering.

### GROUP VIII: PHYSICAL EDUCATION

**Systematic Class Work.** This consists of vigorous drill with dumbbells, clubs, bar-bells, etc., for the boys; for the girls, general development exercises in walking and running, simple free movements, recreative games, and out-door sports.

**Progressive graded work** on various pieces of gymnastic apparatus, mat work, and gymnastic games for the boys; free movements, relaxing exercises, mat work, walking drill, and dumbbells and games in the open air for the girls.

# CATALOGUE OF STUDENTS

## COLLEGE OF LIBERAL ARTS

The names of students are followed by the designation of their several class (Sr., Senior; J., Junior; S., Sophomore; F., Freshman; Sp., Special; the letter A indicates that the student is a candidate for the degree of A.B.; the letter S that he is a candidate for the degree of S.B.; the letter M that he is a pre-medical student.

Abel, Belton C.	F.,	A	San Pedro
Adam, Dolores Sybilla	F.,	A	Los Angeles
Adams, Clarence Edward	F.,	A	Los Angeles
Adams, Edith	S.,	A	Los Angeles
Adams, Egbert	S.,	A	Upland
Adams, Mary A.	Sp.,	—	Long Beach
Adams, Romola M.	Sp.,	—	Long Beach
Adams, Veda Howell	Sp.,	—	Los Angeles
Adler, Marion	F.,	A	Los Angeles
Aid, Frank D.	J.,	A	Los Angeles
Aiken, Doris Isabel	S.,	A	Los Angeles
Airth, Marion Gertrude	Sp.,	—	Los Angeles
Albert, Roberta Faythe	J.,	A	Los Angeles
Albright, Esther	F.,	A	Redondo Beach
Alcorn, Donald Eldredge	S.,	M	Hollywood
Alderson, Harriet	F.,	A	Long Beach
Alexander, Evelyn V.	J.,	A	Los Angeles
Allen, Marie Elizabeth	S.,	A	Hollywood
Allen, Maude LaVerne	S.,	A	Fresno
Allen, Willis Warren	S.,	A	Los Angeles
Allin, Helena	Sr.,	A	Los Angeles
Alvord, Grace Lucile	J.,	A	Los Angeles
Ames, Ruth Anne	Sr.,	A	Pasadena
Amestoy, Juanita	F.,	A	Los Angeles
Anderson, Cora Ingeborg	F.,	A	Los Angeles
Anderson, Grace Evelyn	F.,	A	Hollywood
Anderson, M. Anna	S.,	A	Aspen, Colorado
Anderson, Samuel Bard	F.,	A	Los Angeles
Archer, William John	Sp.,	—	Hollywood



Armstrong, Caroline	Sp.,	—	San Luis Obispo
Armstrong, Gladys Mae	Sp.,	—	Los Angeles
Arnold, James Clinton	Sp.,	—	Los Angeles
Arthur, Emmond Russell	F.,	M	Los Angeles
Arthur, Ruth Maude	S.,	A	Covina
Askin, J. Morgan	F.,	A	Vallejo
Atkinson, Jessamine C.	F.,	M	Los Angeles
Avery, Helen Christine	F.,	A	Los Angeles
Bacheller, Constance Anne	Sp.,	—	Los Angeles
Bailey, Katherine	Sp.,	—	Long Beach
Bailey, Nellie Elizabeth	Sp.,	—	Los Angeles
Bailey, Richard	Sp.,	—	Los Angeles
Bailie, Ruth Morris	S.,	A	Los Angeles
Bainbridge, Augusta C.	Sp.,	—	Harper
Bainbridge, Eulalia	F.,	A	Covina
Baker, Beatrice Courtyne	F.,	A	Los Angeles
Baker, Ben B.	S.,	A	Monrovia
Bancroft, Alice Elizabeth	Sp.,	—	Los Angeles
Bancroft, Irving Reed	Sp.,	—	Los Angeles
Banks, Martha Woolwine	Sp.,	—	Los Angeles
Banning, Eleanor Anne	Sp.,	—	Los Angeles
Banning, May Alice	Sp.,	—	Los Angeles
Bantzer, Blanche	Sp.,	—	Long Beach
Barcome, Glenfield Edward	F.,	A	Los Angeles
Barcroft, Hattie Jane	Sp.,	—	Alhambra
Parker, Eula Mary	J.,	A	Alhambra
Barlow, Genevieve	J.,	A	Gardena
Barnes, Jessie B.	J.,	A	Long Beach
Barnes, Maude Louise	F.,	A	Long Beach
Barnett, Elsie M.	J.,	A	Hanford
Barre, Myrtle Ann	Sp.,	—	Los Angeles
Barrie, Jessie Wilhelmina	Sp.,	—	Los Angeles
Bartlett, Esther Dana	Sp.,	—	Los Angeles
Barton, Carrie N.	Sp.,	—	Long Beach
Bateman, Florence Mae	Sr.,	A	Los Angeles
Beach, Aleene Florence	Sp.,	—	Los Angeles
Beach, Lianda Ella	Sp.,	—	Long Beach
Beaudry, Mary Bertha	F.,	A	Los Angeles
Becker, Marie Elizabeth	Sp.,	—	Los Angeles
Beckwith, Florence P.	S.,	A	Los Angeles
Beed, George	F.,	A	Heber

Beeks, Graydon F.	F.,	A	Long Beach
Behymer, Elsie Olive	J.,	A	Los Angeles
Behymer, Mrs. Glenn	Sp.,	—	Los Angeles
Berlin, Alfred Brooks	F.,	A	Turlock
Berry, Abbie	Sr.,	A	Los Angeles
Berry, Bertha I.	Sp.,	—	Tropico
Berry, Emma Pauline	Sp.,	—	Los Angeles
Berthot, Stephanie A.	F.,	A	Le Loup, Kansas
Besselo, Catherine Lucia	S.,	A	Eagle Rock
Bettin, Vernon Alfred	J.,	A	Los Angeles
Betts, Katherine H.	S.,	A	Los Angeles
Beven, Georgia Hannah	F.,	A	Escondido
Beyl, Charles Merwyn	S.,	A	Denver, Colorado
Beyl, Vera Marguerite	F.,	A	Denver, Colorado
Bigelow, Curtis Rorebeck	Sr.,	A	Los Angeles
Billings, Lauren Rader	F.,	A	McFarland
Billingsley, Ethel E.	S.,	A	Los Angeles
Bissiri, Alfio	F.,	S	Los Angeles
Bissiri, Amelia	F.,	A	Los Angeles
Black, Emla Margaret	Sp.,	—	Los Angeles
Blake, John Philip	F.,	A	Pasadena
Blakeley, Frances	Sp.,	—	Los Angeles
Blakeslee, Harold Curtis	F.,	A	Los Angeles
Blakeslee, Ralph Kennedy	Sp.,	—	Los Angeles
Bland, Adelina	Sp.,	—	Los Angeles
Bland, H. Maud	Sp.,	—	Los Angeles
Blanks, Lillian	F.,	A	Los Angeles
Bloom, Mrs. Thelma F.	Sp.,	—	Los Angeles
Bloomfield, Leonora G.	Sr.,	A	Los Angeles
Blumve, Ruth Augusta	J.,	A	Los Angeles
Boice, Maude Vivian	Sr.,	A	Los Angeles
Bonebreak, Lucile Hildred	F.,	A	Long Beach
Boor, Edith R.	J.,	A	Los Angeles
Bose, Roy George	S.,	A	Los Angeles
Bouchard, Helen O'Dell	S.,	A	Eau Claire, Wis.
Bouton, Edward	S.,	A	Los Angeles
Bowen, Fred Wallace	J.,	A	Verda, Louisiana
Bowen, Louise	F.,	A	Los Angeles
Bowen, Mary S.	J.,	A	Los Angeles
Bower, Halcia E.	Sr.,	A	Los Angeles
Boyce, Wm. T.	Sp.,	—	Fullerton

Boyd, Mary Letty	F.,	A	Los Angeles
Bradley, Floyd Edison	Sr.,	A	Chula Vista
Bradley, Gertrude Muriel	F.,	A	Los Angeles
Bradley, Millie Parsons	S.,	A	Venice
Brand, Harry	Sp.,	—	Los Angeles
Brauer, Lloyd I.	Sp.,	—	Los Angeles
Braun, Helena Elizabeth	J.,	A	Glendale
Breed, Josephine Leland	Sp.,	—	Los Angeles
Breitenstein, Grace C.	Sp.,	—	Los Angeles
Bretthauer, Gertrude F.	J.,	A	Los Angeles
Brewster, Harold Leland	J.,	A	Fresno
Brewster-Smith, Mrs. D .M.	Sr.,	A	Los Angeles
Bridge, David Alexander	J.,	A	Pasadena
Briggs, Howard Fansler	J.,	S	Santa Monica
Briggs, Marie	S.,	A	Santa Ana
Briggs, Marie Antoinette	F.,	A	Montebello
Brockman, Clayton Edward	Sr.,	A	Los Angeles
Brodersen, Carl E.	Sr.,	A	Inglewood
Brokaw, Lana Elizabeth	Sp.,	—	Santa Ana
Brooks, Alice Waldo	F.,	A	Ceres
Brown, Alice Claire	J.,	A	Los Angeles
Brown, Beryl	F.,	A	Whittier
Brown, Edna N.	Sp.,	—	Santa Ana
Brown, Faye	F.,	A	Whittier
Brown, Geneva	J.,	A	Sierra Madre
Brown, Lewis Westervelt	S.,	A	Los Angeles
Brown, Sarah Fails	J.,	A	Los Angeles
Brownell, Giles Corlis	S.,	A	Los Angeles
Browning, Mary Leona	Sp.,	—	Los Angeles
Brubaker, Harriet Mercer	J.,	A	Los Angeles
Brubaker, Ida Veda	J.,	A	Glendora
Brubaker, Martha M.	Sp.,	—	Los Angeles
Bruce, Charles Edson	J.,	A	Hemet
Bruce, Henry Webster	S.,	A	Amherst, Ohio
Bruhn, Helene Florence	Sp.,	—	Los Angeles
Brunn, Florence	F.,	A	Long Beach
Brunn, Howard Thomas	F.,	A	Long Beach
Brush, Helen Dorothy	J.,	A	Los Angeles
Bryson, John A.	Sr.,	A	Downey
Buckham, Mary Helen	Sr.,	A	Los Angeles
Buckham, Stafford	F.,	A	Los Angeles

Buffum, Russell Jones	F.,	A	Long Beach
Bullock, Albert Ernest	Sr.,	A	Los Angeles
Bullock, Frederick W.	S.,	A	Redondo Beach
Bund, Jannette I.	Sp.,	—	Hollywood
Burdick, Earl Kirkwood	F.,	S	Santa Ana
Burgaize, Wilfred	F.,	A	Santa Monica
Burge, Evelyn Sarah	Sr.,	A	Santa Ana
Burgess, Evelyn Sarah	S.,	A	San Fernando
Burnes, Margaret	Sp.,	—	Los Angeles
Burkett, Richard Clare	F.,	M	Orange
Burnight, Ernest Robert	Sr.,	A	Los Angeles
Burnight, Ralph Fletcher	S.,	A	Los Angeles
Burnight, Ruth Elizabeth	J.,	A	Los Angeles
Burns, Daisy Marguerite	J.,	A	Long Beach
Burns, Phil	Sp.,	—	Los Angeles
Burton, Helen	J.,	A	Los Angeles
Burton, Lois R.	Sr.,	A	Los Angeles
Burton, Sarah	S.,	A	San Gabriel
Busker, Albertus Jacob	Sp.,	—	Los Angeles
Butters, Archibald D.	Sp.,	—	Long Beach
Byerts, Nettie	Sp.,	—	Redondo Beach
Byrne, Loretta Petronilla	S.,	A	Los Angeles
Cade, Edith Almera	Sp.,	—	Long Beach
Calkins, Lorna Ruth	F.,	A	Los Angeles
Callaway, Ezra Samuel	Sp.,	—	Orion, Illinois
Campbell, Helen Estelle	J.,	A	Tucson, Arizona
Campbell, Juliette Dumont	J.,	A	Los Angeles
Carden, Helen Elizabeth	F.,	A	Santa Ana
Carey, Katharine Lee	Sp.,	—	San Pedro
Carleton, Ella Roziena	F.,	A	Los Angeles
Carleton, Harold A. R.	S.,	A	Hollywood
Carlisle, Thelma	F.,	A	Los Angeles
Carlson, Elsie Mathilda	Sr.,	A	Riverside
Carpenter, Elizabeth	F.,	A	Los Angeles
Carr, Charlotta	Sp.,	—	Los Angeles
Carr, Harold Fremont	F.,	A	Arcadia, Fla.
Carr, Hazel May	Sp.,	—	San Pedro
Carrick, Edna	F.,	A	Roseburg, Oregon
Carter, Eileen	S.,	A	Los Angeles
Carter, Juvily Elizabeth	Sp.,	—	Santa Ana
Cartwright, Royden	Sp.,	—	Los Angeles
Carver, Leroy L.	F.,	A	Los Angeles

Casey, Charles Wendell	F.,	A	Los Angeles
Cashin, Harold Francis	F.,	A	Los Angeles
Catland, Sallie	Sp.,	—	Los Angeles
Catudal, Annette Elia	J.,	A	Los Angeles
Cauthorn, Leah	J.,	A	Los Angeles
Cereghino, William F.	J.,	A	Los Angeles
Chamberlin, Edward J.	J.,	S	Los Angeles
Chamberlin, Mrs. F. H.	Sp.,	—	Los Angeles
Chamberlain, I. Clark	S.,	A	Los Angeles
Chamberlin, Joie L.	Sr.,	A	Los Angeles
Chambers, Eleanor K.	Sp.,	—	Los Angeles
Chance, Kathryn Ann	Sp.,	—	Los Angeles
Charlson, Ellsworth Dalbert	F.,	A	Los Angeles
Chase, Florence Zoe	S.,	A	Los Angeles
Chase, Gladys	S.,	A	Los Angeles
Chase, Vera A.	Sr.,	A	Los Angeles
Chatters, Ford A.	Sp.,	—	Flint, Michigan
Chesnutt, Robb McKinley	F.,	A	Redlands
Chick, Oscar Ralph	S.,	A	Los Angeles
Christiansen, Davida	F.,	M	Los Angeles
Church, Edith May	Sp.,	—	Glendale
Chute, Helen Harris	Sp.,	—	Los Angeles
Claberg, Clay	Sr.,	A	Los Angeles
Clarey, Donald Herbert	F.,	A	Inglewood
Clark, Claudia L.	Sp.,	—	Los Angeles
Clark, Mrs. Cora Bowen	Sr.,	A	Los Angeles
Clark, Jessie Lee	Sp.,	—	Los Angeles
Clark, Mrs. J. H.	Sp.,	—	Los Angeles
Clark, Leo Farnum	S.,	A	El Centro
Clark, Loren Tompkins	Sp.,	S	Los Angeles
Clark, Marian Weller	Sr.,	A	Los Angeles
Clark, Olin Judson	Sp.,	S	Pasadena
Clark, Ray Henry	J.,	S	Huntington Park
Clay, Margaret Ethel	S.,	A	Los Angeles
Clayton, John Henry	S.,	M	Los Angeles
Cliff, Nelson Alfred	F.,	A	San Diego
Clifford, Howard Edgar P.	F.,	A	Alhambra
Clifford, Lottie Ione	Sr.,	A	Los Angeles
Cobbs, Elizabeth Banning	F.,	A	Los Angeles
Cochran, Harriet A.	Sp.,	—	Los Angeles
Cochran, Mabel Edna	S.,	A	San Jose



Coddington, Ethel E	Sp.,	—	Los Angeles
Colborn, Maude Nellie	F.,	A	Upland
Colburn, Walter Erford	F.,	A	Riverside
Coleman, Kaud K.	Sp.,	—	Los Angeles
Collings, Blanche	Sp.,	—	Santa Ana
Collins, Doris	Sp.,	—	Los Angeles
Cone, Gladys Myra	Sr.,	A	Compton
Conger, Genevieve	S.,	A	Olive
Conn, Mae E.	F.,	A	Los Angeles
Constant, Claribel	F.,	A	Los Angeles
Cook, Fern F.	F.,	A	Ontario
Cook, Harold William	F.,	A	Los Angeles
Cook, Leona C.	J.,	A	Ontario
Cooper, Alice Cecelia	Sp.,	—	Los Angeles
Cooper, Paul Joshua	F.,	A	Turlock
Copeland, John Drew	S.,	A	Rivera
Copps, Rufus James	F.,	A	Hollywood
Cordes, Herbert Albert	S.,	S	Los Angeles
Cornell, James Huston	S.,	A	Fresno
Cornwell, May	S.,	A	Glendale
Couch, Esther Tanner	S.,	A	Los Angeles
Cowell, Jane	Sp.,	—	Los Angeles
Cox, James Cecil	S.,	A	Los Angeles
Craig, Alfred Leslie	S.,	A	Long Beach
Craig, Gerald A.	Sr.,	A	Fullerton
Crain, Anna Delia	J.,	A	Pasadena
Cramer, Jessie Young	Sp.,	—	Los Angeles
Crandall, Howard James	F.,	M	Riverside
Crane, Walter	J.,	A	Los Angeles
Cripe, S. O.	Sp.,	—	Los Angeles
Crippen, Reid Perkins	S.,	A	Homestead, Florida
Crocker, George Edwin	F.,	A	Big Pine
Croissant, Albert Henry	Sr.,	A	Los Angeles
Cronekite, C. E.	Sp.,	—	Los Angeles
Crookshanks, Sara A.	S.,	A	Los Angeles
Crouch, Virginia F.	Sp.,	—	Los Angeles
Crow, Helen	Sp.,	—	San Pedro
Crowell, Mary Dean	Sp.,	—	Los Angeles
Crowther, Rhea	S.,	A	Los Angeles
Cunningham, Wm. Clement	S.,	M	Los Angeles
Curran, Fred S.	F.,	M	Los Angeles

Curtice, Annie Laurie	F.,	A	Turlock
Curtis, Carroll Lee	Sp.,	—	Turlock
Curtis, Kirby Cecil	F.,	A	Clovis
Cushing, A. J.	Sp.,	—	Los Angeles
Cutler, Ede Tirzah	Sp.,	—	Fresno
Daggett, Lowell S.	F.,	A	Los Angeles
Dahlgren, Roland N.	F.,	M	Fresno
Dallas, William James	Sr.,	A	Los Angeles
Danebrock, Leo	F.,	A	Los Angeles
Daniel, Suzanne M. M.	Sp.,	—	Los Angeles
Danielian, Arthur Charles	Sr.,	A	Los Angeles
Dashiell, James Reynolds	Sp.,	—	Los Angeles
Daugherty, Francis Leslie	F.,	A	Los Angeles
Davenport, Helen Strother	F.,	A	Los Angeles
Davis, Corinne	Sp.,	—	Los Angeles
Davis, Dorothy Stephens	F.,	A	Los Angeles
Davis, Earl Dearmond	S.,	A	Los Angeles
Davis, Heloise Marie	Sr.,	A	Los Angeles
Day, Alice Helen	S.,	A	Pasadena
DeArmond, Zolo Robert	J.,	A	Los Angeles
Deffenbach, Roy	F.,	A	Los Angeles
Delano, Alice Winnifred	Sp.,	—	Glendale
Dennis, Alice Roberta	J.,	A	Los Angeles
Deuel, Clyde Curtis	J.,	S	Delano
Deveraux, Maud M.	Sp.,	—	Pasadena
DeWald, Henriette Louise	Sp.,	—	Los Angeles
Dickman, Adolph	Sr.,	A	Los Angeles
Dieffenbacher, Paul F.	Sp.,	—	Los Angeles
Dillenbach, Ruth	S.,	A	Alhambra
Dimmitt, Ralph B.	J.,	A	Huntington Park
Diveley, Rhea Mae	F.,	A	Los Angeles
Dockweiler, Mary Gertrude	Sp.,	—	Los Angeles
Dockweiler, Rosario M.	F.,	A	Los Angeles
Dodson, Ellen MacKenzie	S.,	A	Riverside
Doherty, Josephine C.	Sp.,	—	Los Angeles
Dole, Eva Edna	F.,	A	Los Angeles
Dole, Mary M.	Sp.,	—	Los Angeles
Dolley, Lois Evelyn	J.,	A	Long Beach
Dorsey, Karl James	F.,	A	Los Angeles
Doughty, Abbie Hays	Sp.,	—	Los Angeles
Douglas, Laura L.	F.,	A	Clovis

Douglas, Maud Elvina	J.,	A	Los Angeles
Douglas, Maybelle	Sp.,	—	Los Angeles
Douglass, Robert Herschel	S.,	A	Los Angeles
Dower, Florence Muriel	F.,	A	Long Beach
Downey, William Porter	S.,	A	Vernal, Utah
Doyle, F. L.	Sp.,	—	Los Angeles
Doyle, Sue	S.,	A	Los Angeles
Draper, Samuel Thacker	F.,	A	Downey
Drill, Anna	Sp.,	—	Los Angeles
Duerr, Arthur Chris	F.,	A	Los Angeles
Dula, Ethel Lenoir	Sp.,	—	Los Angeles
Duncan, Edith May	F.,	A	Los Angeles
Duncan, Ralph James	F.,	A	Los Angeles
Dunlap, Mary Elizabeth	Sr.,	A	Riverside
Dunn, Doris Ruth	S.,	A	Lamanda Park
Durham, Lewis Earl	Sr.,	A	Manitou, Oklahoma
Durkee, Ruth Taylor	J.,	A	Santa Barbara
Dutton, Mrs. Lilla R.	Sp.,	—	Los Angeles
Dyar, Dorothy Margaret	Sr.,	A	Los Angeles
Dyer, Frances Pauline	F.,	A	Los Angeles
Eade, Lucile	F.,	A	Los Angeles
Easton, Laura Fortune	Sp.,	—	Long Beach
Eckman, Mrs. D. D.	Sp.,	—	Glendale
Edwards, Alpha Earl	F.,	M	Redondo Beach
Edwards, George Richerson	F.,	M	Los Angeles
Edwards, Margaret Leah	Sr.,	A	Whittier
Eggenberger, Emma Ada	Sp.,	—	Long Beach
Elder, Ida Maybelle	Sp.,	—	Pasadena
Elevath, Walter Raymond	F.,	A	Los Angeles
Elliott, J. Paul	Jr.,	A	Los Angeles
Elliott, Ruth	Sp.,	—	Los Angeles
Ellis, Daniel Eric	Sp.,	A	Los Angeles
Elwin, Mrs. Gertrude P.	S.,	A	Los Angeles
Embry, Alton T.	F.,	A	Salinas
Emery, Muriel Grace	F.,	A	Los Angeles
Emery, Ray Earl	S.,	A	Fullerton
Emmons, Lawrence Barton	Sp.,	—	Los Angeles
Enenkel, William Alexander	Sp.,	—	Pasadena
Enfield, Oscar Davenport	Sp.,	—	Los Angeles
English, Lois	J.,	A	Los Angeles
Epstein, Alfred	J.,	M	Los Angeles

Erb, Maud Winifred	F.,	A	Los Angeles
Espey, Frances A.	Sp.,	—	Long Beach
Espy, Herbert G.	F.,	A	Culver City
Evans, E. Manfred	Sr.,	A	Hollywood
Espy, Frances A.	Sp.,	—	Long Beach
Evans, Robert Montgomery	F.,	A	Long Beach
Evans, Ruthetta Marie	S.,	A	Los Angeles
Everett, Mabel E.	J.,	A	Los Angeles
Ewing, J. Andrew	Sp.,	—	Pasadena
Farber, William Polk	F.,	M	Beverly Hills
Farley, Floyd Wesley	J.,	A	Burbank
Faust, Leo Jackson	S.,	A	Los Angeles
Fechtig, Janie Morriss	F.,	A	Los Angeles
Fellows, Lloyd Welker	J.,	A	Los Angeles
Feltham, Dorothy Elizabeth	J.,	A	Long Beach
Feltham, Owen McCrea	F.,	A	Long Beach
Felts, Ruth	J.,	A	Atascadero
Fensom, Cena Jane	F.,	A	Los Angeles
Ferguson, Carrie Hazel	J.,	A	Los Angeles
Ferguson, William Joseph	Sp.,	A	Los Angeles
Ferl, Emily Matilda	J.,	A	San Pedro
Field, William Joseph	S.,	A	Los Angeles
Finch, Florence Winnifred	Sr.,	A	Los Angeles
Fink, Georgia M.	Sp.,	—	Los Angeles
Fisher, Pearl B.	Sr.,	A	Los Angeles
Fitch, Katherine	F.,	A	Los Angeles
Fleming, Elton Fremont	F.,	A	Pasadena
Fleming, Forest Elroy	S.,	M	Los Angeles
Fleming, Hattie A.	Sp.,	—	Los Angeles
Fletcher, Abbie Naomi	Sp.,	—	Long Beach
Fletcher, Helen Frances	F.,	A	Los Angeles
Flynn, John L.	F.,	S	San Pedro
Flynn, Louise	Sp.,	—	Los Angeles
Flynn, Mary	Sp.,	—	Los Angeles
Fossett, Anna Leah	F.,	A	Hemet
Fossett, Harold	F.,	A	Hemet
Foster, Emma Viola	F.,	M	Pasadena
Foster, Erma Alicia	F.,	A	Compton
Foster, Lois May	F.,	A	Compton
Foster, Mrs. R. A.	F.,	A	Brooklyn, N. Y.
Fowler, Mildred Aileen	J.,	A	Los Angeles

Francis, Etta L.	Sp.,	—	Los Angeles
Franklin, Veta	Sp.,	—	Glendale
Frasher, Ernest E.	F.,	A	Los Angeles
Fredericks, Agatha Agnes	J.,	A	Los Angeles
Freed, Morris	Sr.,	A	Los Angeles
Freeman, Azel Thomas	F.,	A	South Pasadena
Frew, Helen Fern	F.,	A	Tulare
Freydberg, Esther	Sr.,	A	Petrograd, Russia
Frier, Robert Linden	F.,	A	Los Angeles
Frizelle, Earle Beech	F.,	A	Los Angeles
Fuller, Iona Faye	Sr.,	A	Los Angeles
Fuller, Ruth	Sp.,	—	Los Angeles
Fulton, Lester Bond	Sp.,	—	Los Angeles
Fulton, Marjorie	S.,	A	Alhambra
Gallup, Luke L.	Sp.,	—	Los Angeles
Gansner, William George	S.,	S	Colton
Gant, Minnie	Sp.,	—	Long Beach
Garcia, Vicente	F.,	M	Los Angeles
Gard, Clare DeWolfe	Sr.,	S	Monrovia
Gard, Earle William	Sr.,	S	Monrovia
Gard, Margaret Frances	F.,	A	Los Angeles
Gard, Raymond Karl	F.,	S	Monrovia
Garner, E. Virginia	Sp.,	—	Los Angeles
Garner, George William	F.,	S	Los Angeles
Garner, Floyd Henry	F.,	A	Los Angeles
Garred, Max Frank	S.,	A	Coulee City, Wash.
Gay, Martha Belle	Sp.,	—	Long Beach
Geary, Inez Elizabeth	Sp.,	—	Los Angeles
Geissinger, Wayland Bryan	Sr.,	A	Los Angeles
George, Noel Ferrin	S.,	A	Los Angeles
Getzlaff, Edward Eugene	Sp.,	—	Los Angeles
Ghormley, Newton Baxter	Sr.,	A	Los Angeles
Gibbs, Albert Dewitt	F.,	A	Long Beach
Giffen, Marguerite Nell	F.,	A	Los Angeles
Gilbert, Hazel J.	Sr.,	A	Pasadena
Gill, James William	F.,	A	San Bernardino
Girdlestone, Catherine	F.,	A	Los Angeles
Girdlestone, May	Sr.,	A	Los Angeles
Gleiss, Gladys I.	J.,	A	Los Angeles
Glenn, Clarence Leroy	Sp.,	—	Los Angeles
Glick, Annette	J.,	A	Los Angeles



Glover, Catherine	F.,	A	Los Angeles
Goen, Paul	F.,	S	Big Pine
Goetz, Margaret Josephine	J.,	A	Los Angeles
Goldsberry, Helen Frances	S.,	A	Pasadena
Goldschmidt, Josephine N.	F.,	A	Los Angeles
Goldsmith, Ruth B.	Sp.,	—	Los Angeles
Goldthwaite, Helen Lucy	Sp.,	—	Glendale
Good, Sydney Vincent	J.,	A	Los Angeles
Goodell, Percy Wayland	F.,	A	Los Angeles
Goodwin, Paul John	Sr.,	A	Los Angeles
Goodlander, George	Sr.,	A	Pasadena
Gormley, Mrs. Harriet	S.,	A	Los Angeles
Gouailhardou, Ida Emilie	S.,	A	Los Angeles
Gould, Roscoe	F.,	A	Los Angeles
Goulet, F. X.	J.,	A	Los Angeles
Grace, Mary Ethelyn	S.,	A	Gardena
Grant, Ivy Mary	J.,	A	Hanford
Gray, Helen	Sp.,	—	Long Beach
Gray, Russell Merle	S.,	M	Los Angeles
Greenleaf, Lucile	S.,	A	Los Angeles
Grieve, Jessie Marie	Sr.,	A	Los Angeles
Griffin, Harry E.	J.,	A	Pomona
Griffin, Herschel R.	Sr.,	A	Los Angeles
Griffin, Leonora Anita	S.,	A	Los Angeles
Griffith, Margaret	Sp.,	—	Los Angeles
Grimes, Ethel Bertha	S.,	A	Arcadia
Grimes, William Frank	J.,	S	Pasadena
Grinnell, George	Sp.,	A	Los Angeles
Grow, William Donald	J.,	A	San Bernardino
Grua, Clifford Perry	Sr.,	A	South Pasadena
Grua, Esther Selma	F.,	A	South Pasadena
Gschwend, Carl	F.,	A	Los Angeles
Gunn, Helen M.	F.,	A	Independence
Gunning, Alma E.	S.,	A	Los Angeles
Gurney, Barbara Elizabeth	S.,	A	Los Angeles
Gustafson, Axel W.	F.,	M	Los Angeles
Guthridge, Russell M.	Sr.,	A	Los Angeles
Haber, Phil	F.,	A	Los Angeles
Haberman, Samuel John	F.,	A	Michigan City, Ind.
Hackney, Paul Claire	S.,	A	Riverside
Haight, Raymond Leroy	S.,	A	Chatsworth

Haines, Mabel Rainsferd	Sp.,	—	Santa Ana
Haisch, John Howard	F.,	A	Los Angeles
Halcomb, M. Ysobel	F.,	A	Los Angeles
Hall, Arden Jay	S.,	A	Los Angeles
Haller, Walter Daniel	F.,	A	St. Louis, Mo.
Halstead, Robert Herbert	Sp.,	—	Lansing, Michigan
Hamaker, Leonard Eugene	F.,	A	Santa Ana
Hamilton, Gladys Beatrice	Sp.,	—	Tropico
Hamilton, W. Wright	F.,	A	Upland
Hammond, Leta V.	F.,	A	Los Angeles
Hammond, Mrs. Maud W.	J.,	A	Los Angeles
Hammond, Olga	Sr.,	A	Riverside
Handy, Truman Bishop	F.,	A	Los Angeles
Haney, Ralph	Sp.,	—	Los Angeles
Hanning, Esther Merl	Sr.,	A	Santa Ana
Hannum, Hortense Laura	F.,	A	Los Angeles
Hanson, Ernest Albin	F.,	S	Los Angeles
Hanser, Ernest Swartz	F.,	S	Los Angeles
Hardy, Sophie	Sp.,	—	Santa Ana
Hargis, Helen Emmalee	S.,	A	Los Angeles
Harkness, Elizabeth Jean	Sp.,	—	Pasadena
Harley, John Eugene	Sr.,	A	Los Angeles
Harnett, Jane Elizabeth	Sp.,	—	Long Beach
Harnett, Josephine	F.,	A	Burnett
Harris, Abraham Isador	Sp.,	—	Minneapolis, Minn.
Harris, Gladys Reo	J.,	A	Pasadena
Harris, Margaret Maureen	F.,	A	Los Angeles
Harrison, C. W.	Sp.,	—	Los Angeles
Harrison, Helen Margaret	F.,	A	Los Angeles
Hart, Esther E.	Sp.,	—	Hermon
Hart, Veva	Sp.,	—	Huntington Park
Hartford, Emile Augustus	J.,	A	Los Angeles
Harvey, Rowland Hill	S.,	A	Los Angeles
Harvey, Thaddeus Parker	F.,	A	Santa Paula
Hasselo, Lorraine	F.,	A	Ontario
Hastings, Georgia Evelyn	Sp.,	—	Los Angeles
Haughtelin, Carl Deane	F.,	A	Los Angeles
Havener, John Lee	Sp.,	—	Alhambra
Hawkins, Walter R. G.	J.,	A	Pasadena
Hayes, Beulah Mae	Sp.,	—	Los Angeles
Hays, Earl S.	Sp.,	—	Los Angeles

Hayward, Mrs. Dora E.	Sp.,	—	Long Beach
Hazeltine, Herbena Isabelle	F.,	A	Los Angeles
Hazeltine, Mary Elaine	F.,	A	Los Angeles
Hazeltine, Mina E.	Sp.,	—	Los Angeles
Hazeltine, Roland P.	S.,	S	Los Angeles
Hazelton, Earle Foote	F.,	S	Pasadena
Hazelton, Mildred McComas	F.,	A	Los Angeles
Hedenberg, Edna Lancaster	Sp.,	—	Los Angeles
Hedley, George Percy	F.,	A	Redondo Beach
Hedwick, Albert Earl	F.,	A	Los Angeles
Heflinger, Lydia Elsie	F.,	A	Hollywood
Heggie, Cammie Carey	Sp.,	—	Hollywood
Heintz, Lola R.	Sp.,	—	Los Angeles
Helm, Henrietta Sarah	Sr.,	A	Pasadena
Helm, Isabelle	F.,	A	Pasadena
Helm, Marion Ruth	J.,	A	Pasadena
Henderson, Clifford	S.,	A	Los Angeles
Henninger, George Ross	F.,	S	Venice
Henrichs, Maude Marie	Sp.,	—	Pasadena
Henrickson, Althea Lenora	J.,	A	Los Angeles
Henshall, Irene L.	S.,	A	Los Angeles
Hepler, Phillis	F.,	A	Pasadena
Herbert, Alvin Arthur	S.,	A	Long Beach
Herrinton, Luella Grace	F.,	A	Long Beach
Herzog, Jeannette Louise	Sp.,	—	Los Angeles
Hester, Orie C.	F.,	A	Los Angeles
Hewitt, Edward Mercer	J.,	S	Los Angeles
Hewitt, George Willie	Sr.,	A	Tropico
Hey, Elton	F.,	M	Los Angeles
Heywood, Ralph McCabe	F.,	A	Hollywood
Hicks, Robert Stanley	Sr.,	A	El Monte
Hidden, Gladys	S.,	A	Los Angeles
Higgins, Lena	S.,	A	Long Beach
Hiles, Robert Lewis	F.,	A	South Pasadena
Hill, Breta B.	S.,	A	Los Angeles
Hill, Gladys Grace	Sr.,	A	Los Angeles
Hill, Henrietta	F.,	A	Los Angeles
Hinckley, Ethel Marian	Sr.,	A	Los Angeles
Hinsdale, Jennie Ruth	Sr.,	A	Los Angeles
Hirschfield, Ellis Isadore	F.,	A	Los Angeles
Hiskey, Marguerite Irene	S.,	A	Los Angeles

Hitchcock, Earl	Sp.,	—	Los Angeles
Hocking, Nellie Ray	Sp.,	—	Pasadena
Hodgdon, Marie Caroline	Sp.,	—	Los Angeles
Hodge, H. Vernon	S.,	A	Long Beach
Hoeflich, Edward Louis	F.,	A	Los Angeles
Hofert, Esther Lydia	J.,	A	Los Angeles
Hoffman, E. Dow	S.,	A	Murray, Iowa
Holcomb, Douglas Arthur	F.,	A	Banning
Holderness, Miss L. B.	Sp.,	—	Alhambra
Hollabaugh, Julian Graeme	F.,	A	Anaheim
Hollingsworth, Joycie Jones	Sr.,	A	Casa Verdugo
Honrighausen, George A.	J.,	A	Gardena
Hong, Chi P.	Sp.,	—	Los Angeles
Hood, Blanche	S.,	A	Los Angeles
Hood, Mary Catheryn	S.,	A	South Pasadena
Hoppe, Katharine Adle	S.,	A	Lost Hills
Horn, Florence Louise	Sp.,	—	DeKalb, Illinois
Horne, Ruth	J.,	A	Hollywood
Horawitz, Samuel	F.,	A	Los Angeles
Horton, Ernest Horace	Sr.,	A	Pasadena
Horton, H. J.	F.,	A	Long Beach
Horton, Louise	Sr.,	A	Long Beach
Hovey, Byron P.	S.,	A	Los Angeles
Howell, Editha	J.,	A	Santa Ana
Howell, Kenneth Lambert	F.,	A	Montebello
Hubbard, Ruth	S.,	A	Los Angeles
Hubbard, Virginia D.	Sr.,	A	Los Angeles
Hughes, Daisy M.	Sp.,	—	Los Angeles
Hughes, Elise Elderkin	J.,	A	Los Angeles
Hughes, Faye	Sp.,	—	Los Angeles
Hughes, Hal D.	Sr.,	A	Tempe, Ariz.
Huff, William Frederick	Sp.,	—	Los Angeles
Hull, Ruth	S.,	A	Orange
Hume, Georgianna Mary	F.,	A	Venice
Himmel, Lucy	J.,	A	Los Angeles
Humphreys, Helen Marie	S.,	A	Los Angeles
Humphry, Floyd Mechem	F.,	A	Los Angeles
Hunsberger, Neva M.	Sp.,	—	Reedley
Hunt, Jonathan R.	Sp.,	—	Venice
Hunt, Floyd Freeman	S.,	S	Los Angeles
Hunt, Paul Adams	S.,	A	Los Angeles

Huntington, Ruth	S.,	A	Des Moines, Iowa
Hurlburt, Homer Winslow	F.,	A	La Mesa
Hurlbut, Ethel Abbie	Sr.,	A	Los Angeles
Huse, Edwin Ernest	S.,	A	Los Angeles
Hussey, Anna Helena	Sp.,	—	Fullerton
Hutchinson, John Edgar	J.,	A	Los Angeles
Hutchison, Mrs. Emma R.	Sr.,	A	Los Angeles
Hutchison, W. Clair	Sp.,	—	Corona
Hutt, James	Sp.,	—	Los Angeles
Huycke, Harold D.	Sp.,	—	Venice
Hyatt, Mary E.	S.,	A	Pasadena
Iden, Zepha Maude	F.,	A	Bigelow, Missouri
Inman, Milton Miller	F.,	A	Los Angeles
Inwood, Gertrude Alfrida	J.,	A	Los Angeles
Inwood, Marian Pauline	J.,	A	Los Angeles
Isenor, Albert P.	S.,	S	Huntington Beach
Iverson, Ida Christine	Sp.,	—	Los Angeles
Iwanaga, Kiichi	Sp.,	—	Los Angeles
Jack, F. M.	Sp.,	—	Los Angeles
Jackson, Bernice deMont	Sr.,	A	Los Angeles
Jacoby, Edgar H.	Sr.,	A	San Jose
Jaconbowsky, Serge	F.,	M	Los Angeles
James, Lillian Beatrice	Sp.,	—	Los Angeles
Jamgochian, Araxie	J.,	A	Los Angeles
Jamison, Earle James	Sp.,	—	Redondo Beach
Jansen, Christine Fossler	Sp.,	—	San Pedro
Jaques, Burnett Pond	F.,	A	Los Angeles
Jaques, Marjorie Beatrice	F.,	A	Los Angeles
Javier, Emilio Cruz	Sp.,	—	Malate, Manila, P. I.
Jayne, Ralph T.	J.,	S	Los Angeles
Jeancon, Etta C.	Sp.,	—	Los Angeles
Jesurum, Elize	F.,	A	Anaheim
Johnson, Amelia Caroline	J.,	A	Los Angeles
Johnson, Clara B.	Sp.,	—	Moore, Idaho
Johnson, Howard	F.,	A	Los Angeles
Johnson, Louiez Lester	J.,	A	Los Angeles
Johnson, Lucile M.	Sr.,	A	Ephraim, Utah
Johnson, Margaret	F.,	A	Los Angeles
Johnson, Ruth Elizabeth	Sr.,	A	Pasadena
Johnson, Verner O.	J.,	A	Kingsburg
Johnson, William Bede	J.,	A	Los Angeles



Johnston, Wendella Valeria	F.,	A	Los Angeles
Jones, Herbert	S.,	A	Los Angeles
Jones, Mariam Newton	S.,	A	Los Angeles
Jones, Russell S.	Sp.,	—	Los Angeles
Jordan, Henry Ewin	S.,	S	Los Angeles
Jordan, Wayne Early	J.,	A	Los Angeles
Josenhans, Margaret E.	F.,	A	Los Angeles
Joslin, Clarence E.	F.,	S	Los Angeles
Joy, Elmer Reuben	F.,	A	Santa Paula
Joy, Herman Charles	S.,	A	Greeley, Colorado
Judd, Caroline Lucy	Sp.,	—	Santa Monica
Judson, Louise Foster	J.,	A	Los Angeles
Jue, Kwong Shue	F.,	A	Los Angeles
Juvinall, Gladys Marie	F.,	A	Monrovia
Kadletz, F. S.	Sp.,	—	Los Angeles
Kadushin, Matthew	S.,	M	Los Angeles
Kaiser, G. Bernice	Sp.,	—	San Jacinto
Kaler, William W.	S.,	A	Los Angeles
Kalliwoda, Gladys May	Sr.,	A	Los Angeles
Kallstedt, Francis E. E.	J.,	A	Pasadena
Keen, Margaret Ann	Sr.,	A	Whittier
Kellar, Naomi	J.,	A	Los Angeles
Kelly, Alice Cecelia	Sp.,	—	San Francisco
Kelly, Fred Warren	Sp.,	—	Los Angeles
Kelly, Genevieve Eileen	F.,	A	Los Angeles
Kelsey, James C.	J.,	A	Los Angeles
Kemp, George W.	F.,	A	Anaheim
Kendall, Joseph H. S.	J.,	A	Los Angeles
Kennedy, Robert L.	Sp.,	—	Los Angeles
Kent, Arthur Harold	Sr.,	A	Madison, Wisconsin
Kern, Helen	J.,	A	Los Angeles
Kersey, Cleon	Sr.,	A	Los Angeles
Ketcheson, Pauline Evelyn	F.,	A	Upland
Kim, Kwan You	J.,	A	Los Angeles
Kimball, Mary Jo	Sr.,	A	Glendora
Kimmel, Stanley Preston	Sp.,	—	Los Angeles
Kinchen, Elijah Wesley	Sp.,	—	Los Angeles
Kinder, Evelyn	J.,	A	Los Angeles
King, Evert E.	F.,	A	Los Angeles
King, Richard Bernard	Sp.,	—	Los Angeles
King, Ruby Mildred	Sr.,	A	Long Beach

King, Veda Patricia	S.,	A	Los Angeles
Kipp, Warren Augustus	F.,	M	Yonkers, New York
Kirby, Charlotte Muretta	F.,	A	San Gabriel
Kline, Leo Clifford	S.,	A	Los Angeles
Kling, Clarence	F.,	A	Pasadena
Knape, Elsa Evelyn	F.,	A	Gardena
Knecht, Marjorie	Sp.,	—	Redlands
Knichrehm, Carrie	J.,	A	Los Angeles
Knight, Charles Leonard	Sp.,	—	Los Angeles
Knott, James Proctor	Sr.,	A	Los Angeles
Koebig, Julia Elise	Sp.,	—	Los Angeles
Kolts, Robert Freeman	F.,	M	Glendale
Kopp, Theodore Edward	S.,	S	Bell
Krause, Alice	Sp.,	—	Los Angeles
Krause, Anna	S.,	A	Los Angeles
Krebs, William	S.,	S	Azusa
Krick, Minnie Amilie	F.,	A	Los Angeles
Kuhnle, Helen Louise	J.,	A	Los Angeles
Kuhrts, George J.	Sp.,	—	Los Angeles
Kuhrts, Sue	F.,	A	Los Angeles
Kurosu, Shinjiro	F.,	M	Los Angeles
Lackey, Helen Katherine	Sr.,	A	Los Angeles
LaDue, Wendell Richard	J.,	S	Wheeling, West Va.
LaFontaine, Merrill Gross	F.,	A	Los Angeles
Lamb, Genevieve Mary	S.,	A	Michigan, N. D.
Lamb, John	F.,	A	Michigan, N. D.
Lambert, Mrs. Emily K.	Sp.,	—	Los Angeles
Lamport, Harry Bowman	F.,	A	Los Angeles
Lamport, Warren Dunn	F.,	A	Los Angeles
Landregan, Gladys Evelyn	Sp.,	—	Los Angeles
Lane, Clayton A.	Sp.,	—	Los Angeles
Lane, Mary Marita	S.,	A	Yucaipa
Langston, Joyce	Sr.,	A	Los Angeles
LaPorte, Mrs. Lura E.	Sr.,	A	Los Angeles
LaPorte, William R.	Sp.,	—	Los Angeles
Lauderbach, Calvin John C.	F.,	A	Santa Ana
Laughren, Catherine	F.,	A	Los Angeles
Lavelle, Michael James	F.,	S	Sierra Madre
Lawler, James Kenneth	J.,	S	Gardena
Lawler, John Wisely	J.,	S	Gardena
Lawlor, Ita	Sr.,	S	Gardena

Lawyer, Donald Kenyon	Sp.,	—	Los Angeles
Lawyer, Paul Carey	F.,	A	Los Angeles
Learned, Willard Francis	F.,	A	Burbank
Leavitt, Frank Norman	J.,	A	El Monte
Leech, Vernon Everett	S.,	S	Los Angeles
Leedy, Josephine	F.,	A	Alhambra
Leege, Lillian Marie	Sp.,	—	Redondo Beach
Leeper, Lloyd D.	F.,	M	Los Angeles
Lehr, M. Henri	Sp.,	—	Los Angeles
Leick, Lucie M.	Sp.,	—	Redlands
Leimkuhler, Macie Edna	Sr.,	A	Pasadena
Leithead, Donald Barker	F.,	A	East Seattle, Wash.
Lent, Mary E.	Sp.,	—	Los Angeles
Leohner, James Robert	F.,	A	Los Angeles
Levering, Fay Burdette	F.,	A	Fair Oaks
Levis, Mahlon	F.,	A	Kingsburg
Levy, Beatrice Alvord	Sp.,	—	Bidwell, Van., B. C.
Lewis, Eugene Maring	F.,	A	Inglewood
Lewis, Winnie D.	S.,	A	Burbank
Lewman, Gertrude	F.,	A	Los Angeles
Lieberg, Helenita	S.,	A	Los Angeles
Lightner, Ernest Elonzie	J.,	A	Abbeville, Ala.
Leinberg, Nora Blanche	Sp.,	—	Los Angeles
Link, Clarence	Sp.,	—	Los Angeles
Link, Edna Marie	Sp.,	—	Los Angeles
Linn, Mary Seaman	J.,	A	Los Angeles
Listman, C. Werner	S.,	S	Los Angeles
Litterer, Bessie	S.,	A	Los Angeles
Little, Charles Henry	F.,	A	Quincy, Illinois
Little, Frederick Elder	F.,	A	Los Angeles
Livernash, Joe Henry	F.,	A	Los Angeles
Livernash, Leo Dean	Sr.,	A	Huntington Beach
Livernash, Leonard Otis	Sr.,	A	Huntington Beach
Lock, Mary Frances	F.,	A	Hermosa Beach
Lockett, Catherine J.	J.,	A	Los Angeles
Lofstedt, Anna Christine	S.,	A	Glenwood, Minn.
Long, Frank R.	Sp.,	—	Los Angeles
Long, Frank Raymond	F.,	A	Los Angeles
Long, Isabel Lillian	Sr.,	A	Los Angeles
Long, Jean	Sp.,	—	Los Angeles
Long, Laura D.	J.,	A	Los Angeles

Long, May	Sr.,	A	Los Angeles
Long, Tirrell Lyman	J.,	A	Los Angeles
Longley, Snow	Sp.,	—	Los Angeles
Longmoor, Harold S.	S.,	A	Mesa, Arizona
Lopez, Malvina	J.,	A	Los Angeles
Lounsbury, Florence M.	J.,	A	Cedar Rapids, Iowa
Lounsberry, Ruth	F.,	A	Los Angeles
Lovejoy, Lena Goldsmith	Sr.,	A	Los Angeles
Lovejoy, Ora Augusta	J.,	A	Los Angeles
Lower, Louise Eleanor	Sr.,	A	Los Angeles
Lower, Will Arthur	F.,	A	Los Angeles
Lowrey, Rachel Gertrude	J.,	A	Wilmington
Lucas, Mildred	F.,	A	Lisbon, N. D.
Lucas, Harry G.	Sr.,	A	San Fernando
Lukens, J. Charles Edw.	Sp.,	—	Coronado
Lyon, Sarah Wildey	Sp.,	—	Los Angeles
McAlmon, Robert Mengies	F.,	A	Los Angeles
McArthur, Xina Eliza	S.,	A	Santa Ana
McCandless, Genevieve	S.,	A	Nemaha, Nebraska
McCartney, Norma	S.,	A	Pasadena
McClintock, Clarence M.	F.,	S	Santa Ana
McCormick, Grace Edith	F.,	A	Los Angeles
McCoy, John Carl	Sr.,	S	Wooster, Ohio
McCrea, Alta M.	J.,	A	Ontario
McCrea, Francis Randolph	F.,	M	Long Beach
McCrary, J. Gillies	J.,	A	Los Angeles
McDaniel, Jean	Sr.,	A	Los Angeles
McDermott, George A.	Sr.,	A	Gardena
McDonald, Anita Annette	F.,	A	Santa Ana
McDonald, Annie Laurie	J.,	A	Los Angeles
McDonald, Bert	F.,	A	Los Angeles
McEllinny, Marion Elizabeth	S.,	A	Los Angeles
McEuen, Isabel	J.,	A	San Jacinto
McFadyen, Dwight Snyder	S.,	A	Long Beach
McGuire, Mary	Sr.,	A	Los Angeles
McHugh, Mona Laura	Sp.,	—	Los Angeles
McIntire, W. C.	Sp.,	—	Los Angeles
McKinnon, Ida Belle	J.,	A	Pasadena
McLaren, Harry Alexander	S.,	M	Bishop
McLaughlin, Gertrude	S.,	A	Los Angeles
McLaughlin, Kathryn Nelle	Sp.,	—	San Pedro

McManis, Nancy P.	Sr.,	A	Rialto
McMillan, Dan Alexander	F.,	A	Los Angeles
McMore, Blanche A.	Sr.,	A	Los Angeles
McNair, Jean Ferguson	Sp.,	—	Pasadena
McNeely, John G.	Sr.,	A	Santa Monica
McNeese, Nora Lee	J.,	A	Los Angeles
McNeill, Ruth Helen	S.,	A	Los Angeles
MacCormack, W. Rowland	F.,	A	Los Angeles
MacDonald, Esther Mary	J.,	A	Los Angeles
MacDuff, Harriet Catherine	Sp.,	—	Pasadena
MacGaffery, Elizabeth	Sp.,	—	Pasadena
MacIntosh, Eleanor C.	S.,	A	Los Angeles
Mack, Hebe Louise	Sp.,	—	Ocean Park
Mackie, Mildred Whitman	F.,	A	Los Angeles
Madden, Florence N. E.	F.,	A	Los Angeles
Magarian, Mushan	F.,	A	Fresno
Mahan, Henry Weston	J.,	A	Pasadena
Mahoney, Alice Lillian	J.,	A	Los Angeles
Marlowe, Madeline T.	F.,	A	Pasadena
Marshall, Oscar C.	F.,	A	Chino
Marston, Bert Oliver	F.,	A	Los Angeles
Martens, Frieda Marie	J.,	A	Los Angeles
Martin, A. Clair	F.,	A	Beaumont
Martin, George M.	Sr.,	A	Beaumont
Martin, Samuel Babbitt	Sp.,	M	Pasadena
Marvin, Hallie	J.,	A	Los Angeles
Mason, Florence Gordon	J.,	A	Los Angeles
Mason, K. Luella	Sp.,	—	Long Beach
Mason, Mildred Helen	S.,	A	Los Angeles
Mason, Sarah E.	Sp.,	—	Pasadena
Mathews, Nettie Alice	J.,	A	Artesia
Matlin, David	Sr.,	A	Los Angeles
Matsuhara, Iwao	Sr.,	A	Los Angeles
Maurer, George Paul	F.,	A	Los Angeles
Maurer, Vera Stuart	Sp.,	—	Los Angeles
Maxfield, M. Joseph	Sr.,	S	Caruthers
Mayo, Ella Brotton	J.,	A	Redondo Beach
Mead, Grace Gertrude	F.,	A	Pasadena
Meade, Frank John	S.,	M	Los Angeles
Mealey, George Michael	S.,	A	St. Paul, Minn.
Meinecke, Joseph Bertrum	S.,	S	Paia Maui, T. H.



Melvin, Ruby Keturah	Sp.,	—	Long Beach
Menn, Edna	Sr.,	A	Los Angeles
Merickel, Estelle Avis	F.,	A	Los Angeles
Merickel, Eva Ruth	S.,	A	Los Angeles
Merrihew, Orrel Lincoln	S.,	A	Pasadena
Metcalf, Mabel Iona	Sp.,	—	Los Angeles
Metcalf, Tom	F.,	A	Los Angeles
Methfessel, Louise Melanie	Sp.,	—	Los Angeles
Metz, John	F.,	A	Los Angeles
Midcalf, Clara	Sp.,	—	Glendale
Millar, Cheryl R.	Sp.,	—	Los Angeles
Miller, Alfred Frederick	F.,	A	Long Beach
Miller, Edwin Woods	Sr.,	A	Los Angeles
Miller, Elnora Belle	Sp.,	—	Los Angeles
Miller, Evelyn	S.,	A	Pomona
Miller, Glen Ira	F.,	A	Brawley
Miller, Margaret Ross	Sp.,	—	Los Angeles
Miller, Marjorie	S.,	A	Los Angeles
Miller, Martin S.	S.,	A	Burton, Wash.
Miller, Reverdy J.	Sp.,	—	Los Angeles
Miller, Robert Stuart	F.,	A	Los Angeles
Miller, Ross V.	J.,	A	Los Angeles
Milligan, Gertrude	J.,	A	St. Louis, Mo.
Mills, Edna A.	S.,	A	Anaheim
Mills, Gordon John	J.,	A	Los Angeles
Miner, Ada M.,	Sp.,	—	Los Angeles
Miners, Earnest A.	F.,	A	Los Angeles
Misner, Dorothy Eleanor	F.,	A	Los Angeles
Mitchell, Helen Augusta	J.,	A	Los Angeles
Mitchell, Lorraine	Sp.,	—	Glendale
Mitchell, Ruth Webber	J.,	A	Ontario
Modesti, Phinoclade	Sp.,	—	Los Angeles
Moffitt, Ray M.	F.,	A	Norwalk
Mohn, Eva May	Sp.,	—	Redondo Beach
Monfort, Harriet	F.,	A	Los Angeles
Montgomery, Blanche M.	Sr.,	A	Compton
Moon, Louise Mary	J.,	A	Los Angeles
Moore, Mrs. Celeste N.	J.,	A	Los Angeles
Moore, Douglas E. C.	Sr.,	A	Los Angeles
Moore, Edith Carol	F.,	A	Fillmore
Moore, Joseph Glenn	F.,	A	San Diego

More, Marguerite	S.,	A	Los Angeles
Morse, Arthur Benton	J.,	A	Los Angeles
Mortley, Olymphina May	F.,	A	Los Angeles
Moses, Eleanor Ann	F.,	A	Los Angeles
Mosher, Ella Dora	Sp.,	—	Glendale
Moskedal, Elisabet Ann	F.,	A	Downey
Moulton, Harold Emery	S.,	A	Long Beach
Mueller, Elmer George	F.,	A	Los Angeles
Mullen, Julia E.	Sp.,	—	Pasadena
Mumper, William Henry	F.,	A	Riverside
Mundorff, Ida Mae	S.,	A	Pasadena
Munroe, Katherine Johnsn	Sp.,	—	Los Angeles
Murakami, Peter Toranosuke J.,		A	Los Angeles
Murray, Phillips Welwood	Sr.,	A	Los Angeles
Naismith, Helen Agnes	S.,	A	Los Angeles
Nash, Charlotte Ada	S.,	A	Los Angeles
Nathan, Robert Florance Jr.	Sr.,	A	New York City
Nau, Converse	S.,	A	Los Angeles
Neal, A. C.	F.,	S	Los Angeles
Neal, Arthur St. Clair	F.,	A	Los Angeles
Neel, Lloyd Earl	F.,	A	Turlock
Nelson, Elmer Serano	Sr.,	A	Los Angeles
Nelson, Jennette	Sr.,	A	Los Angeles
Nelson, Manuel Drummond	F.,	A	Los Angeles
Nelson, M. Grant	Sp.,	—	Los Angeles
Nelson, Pine Dexter	F.,	A	Los Angeles
Nesty, Darling Elody	J.,	A	Roseau, B. W. I.
Neuls, Marion	S.,	A	Los Angeles
Neuman, Theodore	F.,	S	Turlock
Newman, William Iver	Sp.,	—	Long Beach
Newsom, Willis	Sp.,	—	Los Angeles
Newton, Genevra Louise	S.,	A	Los Angeles
Nichols, Alma Parker	Sr.,	A	Los Angeles
Nichols, George Dunning	F.,	M	Savannah, Mo.
Nicholson, Florence Edith	F.,	A	Gardena
Nicholson, Marion	J.,	A	Gardena
Niemeyer, Laura	F.,	A	Los Angeles
Nilson, Pehr Teodor	Sp.,	—	Los Angeles
Nisbet, Eugene Goodspeed	F.,	A	Upland
Nixon, Joanna Parker	Sr.,	A	Pasadena
Nordstrom, Benjamin G	S.,	A	Kingsburg

North, Therza Elizabeth	S.,	A	Sierra Madre
Oakes, Mary Ethel	Sr.,	A	Colton
Obear, Marjorie F.	S.,	A	Los Angeles
O'Connell, Leland D.	S.,	S	Los Angeles
O'Connor, Zena Catherine	S.,	A	Los Angeles
Oertley, Bernhard	Sr.,	A	Garden Grove
Oertley, George William	F.,	A	Garden Grove
Offdenkamp, A. Ruth	Sp.,	—	Pueblo, Colorado
Ogawa, K.	Sr.,	A	Los Angeles
Olds, Reginald Birdsall	F.,	A	Los Angeles
Oliver, Ila Mary	F.,	A	Fillmore
Oliver, Pearl	F.,	A	Fillmore
Olson, Lawrence Edward	Sp.,	—	Los Angeles
Olson, Reuel L.	J.,	A	Los Angeles
Oneal, Charles Herbert	Sr.,	A	South Pasadena
O'Neil, Eileen	Sr.,	A	Los Angeles
Orfila, Ernest Roland	F.,	A	Los Angeles
Ormsby, Alvin Scott	S.,	A	South Pasadena
Ormsby, Lois Elna	F.,	A	Los Angeles
Ormsby, Mrs. Grace Pullen	Sp.,	—	Los Angeles
Osborne, Clara M.	S.,	A	Los Angeles
Oster, Donald T.	Sp.,	A	Los Angeles
Ott, Vivian L.	S.,	A	Los Angeles
Otto, Frank W. Jr.	S.,	M	Los Angeles
Owens, Thomas Siler	F.,	A	Raymond, Wash.
Owsley, J. G.	Sp.,	—	Pasadena
Oyler, John Dickson	F.,	M	Los Angeles
Oyler, Maude	Sp.,	—	Los Angeles
Padan, Henrietta Craig	J.,	A	Los Angeles
Padrick, Charles Albert	S.,	A	Los Angeles
Palmer, Elmer B.	J.,	A	Compton
Palmer, Frances Mabel	J.,	A	Pasadena
Palmer, Greta Garmo	J.,	A	Los Angeles
Palmer, Percy Edward	J.,	A	Long Beach
Palmer, Zuma Margaret	F.,	A	Pasadena
Pape, Myrtle Harrison	S.,	A	Los Angeles
Park, Anna Belle	F.,	A	Los Angeles
Parker, Florence Mable	S.,	A	Los Angeles
Parmelee, Gale Freeland	F.,	A	Los Angeles
Parsons, Anna Matilda	Sp.,	—	San Pedro
Parsons, Dorothy Ann	F.,	A	Redondo Beach

Partridge, Irene Robinson	Sp.,	—	Los Angeles
Patric, Gladys Emilia	Sp.,	—	Los Angeles
Patterson, Joe Jay	S.,	A	Los Angeles
Patton, Anna Wilson	Sp.,	—	Los Angeles
Patton, Stanley F.	J.,	A	Los Angeles
Paul, Florence Thornburg	Sr.,	A	Los Angeles
Paul, Linda	Sp.,	—	Los Angeles
Paxson, Beatrice Mary	Sr.,	A	Ontario
Pearce, Lillian Carolyn	S.,	A	Los Angeles
Pearce, Pauline Marie	Sp.,	—	Los Angeles
Pearson, Galen	Sp.,	—	Los Angeles
Peck, Marjorie Elizabeth	F.,	A	Los Angeles
Pedgrift, Maude Elizabeth	S.,	A	Los Angeles
Pepper, Elizabeth N.	S.,	A	Los Angeles
Perkins, Clarence Osborn	F.,	A	Los Angeles
Perkins, Neva Joanna	Sr.,	A	Eugene, Oregon
Perkins, Voltaire Duback	Sr.,	A	Los Angeles
Peterson, Jennie Carrie	S.,	A	Los Angeles
Peterson, Etta Louise	S.,	A	Hermosa Beach
Peterson, Janette Florence	Sp.,	—	Pasadena
Peterson, Mildred Elizabeth	J.,	A	Lafayette, Indiana
Pfaffenberger, Clarence J.	S.,	A	Brawley
Phillips, Edna Muriel	Sr.,	A	Los Angeles
Phillips, Jean Isabella	J.,	A	Los Angeles
Phillips, Paul J.	S.,	A	Los Angeles
Pickard, Lila	Sp.,	—	Pasadena
Pierce, Charles Edward	Sr.,	A	Los Angeles
Pierce, Gertrude A.	F.,	A	Tropico
Pierce, Margaret Ellen	Sp.,	—	Tropico
Pierce, Maria Fitch	S.,	A	Los Angeles
Pierce, Paul	Sp.,	—	Glendale
Pierson, Carlyle Fowler	F.,	A	Pasadena
Pilibos, Alexander Stephen	J.,	S	Fresno
Pirie, Isabella Marcus	Sp.,	--	Los Angeles
Pitney, Pauline Jane	Sp.,	—	Los Angeles
Plummer, Louis E.	Sp.,	—	Los Angeles
Podolsky, Boris	J.,	S	Colton
Polkinghorn, Rena Isabelle	Sp.,	—	Los Angeles
Pollich, R. E. Thos.	Sp.,	—	Los Angeles
Pollock, Marian Eliza	Sp.,	—	Los Angeles
Poorman, Mildred May	J.,	A	Los Angeles

Pope, Zemula M.	S.,	A	Los Angeles
Porter, Margaret Annette	J.,	A	Los Angeles
Porter, R. E.	Sp.,	—	Los Angeles
Potter, Mabel Vaughn	Sp.,	—	Los Angeles
Potter, Walter Henry	Sr.,	A	Los Angeles
Powers, Lucy	Sp.,	—	Los Angeles
Powers, Gloria May	F.,	A	Los Angeles
Powers, Martin	F.,	M	San Diego
Preble, Boyd	F.,	S	Santa Ana
Prentiss-Smith, Alice	Sp.,	—	Los Angeles
Prescott, Harold Joseph	F.,	A	Montebello
Price, Mildred	F.,	A	Dexter, Iowa
Prince, Mary Emily	J.,	A	Hemet
Prindle, George Henry Jr.	J.,	A	Williamstown, Mass.
Prior, Gary Earl	J.,	A	Riverside
Prudhon, Harold Edward	S.,	A	Los Angeles
Quinan, Rose M.	Sp.,	—	Los Angeles
Rager, Robert Louis	F.,	A	Santa Monica
Rapp, Vivian	Sp.,	—	Los Angeles
Ramsdell, Ada Hope	Sp.,	—	Los Angeles
Ramsey, Lillie Antoinette	F.,	A	Parlier
Rasmus, Harry	Sr.,	A	Long Beach
Rapp, Coral	S.,	A	Los Angeles
Ratcliff, Margaret Louise	F.,	A	Los Angeles
Rathwell, Thos. Raymond	Sp.,	—	Los Angeles
Read, Thomas Roddy	F.,	A	Los Angeles
Redfern, A. S.	Sp.,	—	Fullerton
Reardon, William F.	S.,	M	Downey
Record, Marjorie	J.,	A	Hollywood
Rector, Wilhelmina May	F.,	A	Los Angeles
Redding, M. Bell	Sp.,	—	Kentville, Nova Sco.
Reed, Lawson	F.,	A	Los Angeles
Reed, Lucile	F.,	A	Los Angeles
Reeves, Claude Lamar	F.,	A	Simla, Colorado
Reid, Laurie Jean	Sp.,	—	Los Angeles
Reimbold, Henriette M.	Sp.,	—	Long Beach
Renison, Aileen H. E.	Sr.,	A	Los Angeles
Rensberger, Romana Roselle	F.,	A	Los Angeles
Repath, Charles Jasper	F.,	A	Los Angeles
Reynolds, L. G.	Sp.,	—	Los Angeles
Rich, Irene	F.,	A	Los Angeles



Rich, Juanita	J.,	A	Los Angeles
Richards, Louise	F.,	A	Los Angeles
Richards, Marcella	J.,	A	Los Angeles
Richardson, Helen Belknap	Sp.,	—	Los Angeles
Richter, Charles Francis	F.,	A	Los Angeles
Rickerich, Anna	Sp.,	—	Los Angeles
Riddick, Joseph Brain	F.,	A	Long Beach
Riley, Portia Alice	F.,	A	Los Angeles
Riley, Sally Clark	Sr.,	A	Los Angeles
Risher, Martha V.	F.,	A	Los Angeles
Roach, Agnes Irene	S.,	A	Pasadena
Roberson, Ury Homer	J.,	A	Los Angeles
Roberts, Andrew Franklin	Sp.,	—	Los Angeles
Roberts, Anna	Sp.,	—	Los Angeles
Roberts, Ruby Eloise	F.,	A	Monrovia
Robertson, Luanna Christine	F.,	A	Santa Monica
Robinson, Elwood Joseph	J.,	A	Los Angeles
Robinson, Mabel E.	Sr.,	A	Long Beach
Rockwell, E. W.	S.,	A	Inglewood
Roe, Marinita B.	Sp.,	—	Los Angeles
Rogers, Bruce Walter	F.,	A	South Pasadena
Rogers, Berdella	Sp.,	—	Los Angeles
Rogers, Islay Caroline	Sr.,	A	Los Angeles
Roseberg, Estelle Leonora	F.,	A	Los Angeles
Rosin, Ethel Esther	S.,	A	Hollywood
Ross, Elinor C.,	J.,	A	Pasadena
Rucker, Mrs. Persa B.	Sp.,	—	Los Angeles
Ruddy, Sarah Agatha	Sp.,	—	Los Angeles
Rudkin, Maude Forsythe	F.,	A	Fillmore
Russell, Eva Margaret	Sp.,	—	Los Angeles
Russell, Ruth Davis	Sr.,	A	Los Angeles
Rust, Walter William	F.,	M	Gordon, Nebraska
Ryan, Frank Joachim	J.,	A	Los Angeles
Ryder, Milton Phillips	F.,	S	Parlier
Ryker, Mary Merrill	Sp.,	—	Pasadena
Rykoff, Sarah	F.,	A	Los Angeles
Ryon, Mrs. Lulu K.	Sp.,	—	Los Angeles
St. John, Lloyd Levi	S.,	A	Hollywood
Sakaizawa, Iohane Fsao	Sp.,	—	Los Angeles
Sallstrom, Alma J.	Sp.,	—	Glendale
Samuel, Mary Elizabeth	F.,	A	Hiawatha, Kansas

Sargent, Harry	J.,	A	Riverside
Sartori, Margaret Pishel	Sp.,	—	Los Angeles
Sato, Kenosuke	J.,	A	Los Angeles
Satoh, Seiji	Sr.,	A	Los Angeles
Sawyers, Ruth	F.,	A	Gardena
Schader, Fred	S.,	M	Santa Monica
Schelnik, Lydia Mathilda	S.,	A	Los Angeles
Schermerhorn, Grace	Sp.,	—	Los Angeles
Schick, Charles J.	Sr.,	A	Glendale
Schlecht, Martha Luella	Sr.,	A	Los Angeles
Schlotte, Nellita Fern	J.,	A	Los Angeles
Schneider, Elsa Laura	S.,	A	Los Angeles
Schnoor, Gladys Blanche	J.,	A	Burbank
Schoeffel, Raymond Louis	Sr.,	A	Los Angeles
Schubert, Will	Sr.,	A	Glendale
Schurr, Dorothy Helen	F.,	A	Puente
Schwarze, Marie	J.,	A	Los Angeles
Scoles, Hudspeth Ellet	S.,	A	Gentry, Arkansas
Scott, Alice Louise	S.,	A	Bakersfield
Scott, Clifford Clark	J.,	A	Bakersfield
Scott, Edith Oriole	Sp.,	—	Los Angeles
Scott, Mrs. H. Georgie	Sp.,	—	Santa Monica
Scott, Jessie Louise	Sp.,	—	Los Angeles
Scovel, Edith Lavina	J.,	A	Los Angeles
Sergeant, William Bryan	F.,	A	Redondo Beach
Sedweek, Edna Marguerite	Sr.,	A	Inglewood
Segerstrom, Esther Louise	J.,	A	Santa Ana
Seldomridge, Carroll Hue	Sp.,	—	Los Angeles
Sentous, Zoe	F.,	A	Los Angeles
Sexton, Andrew Arnold	J.,	A	Los Angeles
Seymour, Mary Dorothy	F.,	A	Los Angeles
Seymour, Mrs. Sophie B.	Sp.,	—	Pasadena
Shafer, Jack Henry	F.,	A	Los Angeles
Shamel, Margaret E.	S.,	A	Corcoran
Sharp, Edwin Thomas	S.,	A	Needles
Sharp, Luther	Sr.,	A	Tulia, Texas
Sharpe, Edith Florence	Sr.,	A	Los Angeles
Shay, Carleton Carlisle	J.,	A	Los Angeles
Shea, Jamie	F.,	M	Tropico
Shearin, Nellie W.	Sr.,	A	Los Angeles
Shepherd, Fannie Louise	Sp.,	—	Los Angeles

Shepherd, Oneita Margaret	F.,	A	Los Angeles
Sherman, G. Leonard	Sr.,	A	Los Angeles
Shinn, Juneau Harry	F.,	A	Filer, Idaho
Shutt, Ethel Emma	S.,	A	Pasadena
Siegel, Marion Harriet	S.,	A	Los Angeles
Siemon, Carl Workman	F.,	S	Santa Monica
Sigler, Grace E.	Sp.,	—	Los Angeles
Sigler, John Henry	S.,	A	Los Angeles
Silverthorne, Isabelle W.	Sp.,	—	Los Angeles
Silvius, Dorothy Marguerite	J.,	A	Los Angeles
Simeral, Estella	Sp.,	A	Los Angeles
Simmons, Benjamin Coleman	F.,	M	Erlanger, Kentucky
Simmons, Glenn Dewitt	F.,	A	Los Angeles
Simonds, Earl Elwyn	Sp.,	—	Pasadena
Simpson, Eddie	J.,	A	Los Angeles
Skinner, Edna E.	J.,	A	Los Angeles
Smart, Albra Mary	J.,	A	Santa Ana
Smith, Aaron J.	F.,	A	Long Beach
Smith, Ada Berry	Sp.,	—	Los Angeles
Smith, E. Burrell	Sp.,	—	Los Angeles
Smith, Edgar	Sp.,	—	Los Angeles
Smith, Emma Elizabeth	S.,	A	Monrovia
Smith, Fred George	Sp.,	.	Los Angeles
Smith, Herbert Lent	F.,	A	Los Angeles
Smith, James Henry	F.,	A	Los Angeles
Smith, James Murray	F.,	A	Los Angeles
Smith, Janet Ferguson	Sp.,	—	Point Fermin
Smith, Lillian May	Sp.,	—	Los Angeles
Smith, Mabel M.	S.,	A	Los Angeles
Smith, Margaret D.	Sp.,	A	Los Angeles
Smith, Margaret M.	Sp.,	—	Los Angeles
Smith, Roy F.	Sp.,	—	Los Angeles
Smith, Ruth Marie	F.,	A	Grand Jctn., Colo.
Smith, Sam	F.,	A	Los Angeles
Smith, Stephen Lloyd	Sr.,	A	Los Angeles
Smith, Wallace	S.,	A	Kingsburg
Smith, Wayne Roe	S.,	A	Glendale
Smith, Wesley Vance	J.,	A	Los Angeles
Snell, Ida Lillian	J.,	A	Los Angeles
Snyder, Elizabeth L.	Sr.,	A	Los Angeles
Solomon, Dorothy Frances	F.,	A	Culbertson, Neb.

Soper, E. Maud	Sp.,	—	Casa Verdugo
Sowden, Harry	Sr.,	A	Los Angeles
Spaeth, Walter Herbert	Sr.,	A	Los Angeles
Spalty, Anna Agatha	Sr.,	A	Los Angeles
Spaulding, David Merrick	F.,	A	Pasadena
Spaulding, Irving M.	Sr.,	A	Pasadena
Speck, Matthew Emil	F.,	M	Scotia
Speer, Carl A.	S.,	A	Los Angeles
Spiegel, Grace Florence	Sp.,	—	Long Beach
Sprenger, Florence Helen	S.,	A	Los Angeles
Squire, James Herbert	Sr.,	A	Los Angeles
Stagg, Ira J.	Sr.,	A	Anaconda, Mont.
Stagg, Samuel Wells	S.,	A	Los Angeles
Staley, Gerald	F.,	A	Los Angeles
Stanley, Roy Chester	Sp.,	—	Los Angeles
Stannard, Ronald Fern	J.,	A	South Pasadena
Stanton, Adrian Cornell	Sp.,	—	Avalon
Starr, C. Raymond	F.,	A	San Diego
Stebbins, Georgia A.	Sp.,	—	Huntington Beach
Steelman, Samuel	S.,	A	Los Angeles
Steeves, Bertha R.	Sp.,	—	Moncton, N. B., Can.
Stein, Feliciana Magdalena	F.,	A	Los Angeles
Sterling, Harriet Bettina	Sp.,	—	Pasadena
Stephenson, J. L.	Sp.,	—	Santa Ana
Stevens, W. Leslie	S.,	A	Grand Jct., Colo.
Steward, Alma R.	Sp.,	—	Los Angeles
Steward, H. Newell	F.,	A	Redondo Beach
Stewart, Anabel Hardin	Sp.,	—	Long Beach
Stilwell, Bettina	Sp.,	—	
Stockton, William Henry	Sp.,	—	Los Angeles
Stofflet, Anna Beryl	F.,	A	Bishop
Stofflet, Mary Kathryn	S.,	A	Bishop
Stone, Ethel Clay	F.,	A	Thermal
Stone, Fannie Olney	Sp.,	—	Glendale
Stone, H. Marguerite	J.,	A	Gardena
Storey, J. Clement	J.,	A	Pasadena
Stone, Mrs. Mildred	Sp.,	—	Los Angeles
Strait, Lyla Huston	Sp.,	—	Redlands
Strain, Lily	Sp.,	—	Fullerton
Strang, Grace O.	Sr.,	A	Pasadena
Strause, Margaret	F.,	A	Los Angeles

Strawinski, Evelyn Minerva	F.,	A	Los Angeles
Stringfield, Vivian Felicia	Sp.,	—	Los Angeles
Struthers, Mrs. Alice	Sr.,	A	Los Angeles
Stuart, Violet	F.,	A	Los Angeles
Studer, Bernard Ernest	S.,	A	Los Angeles
Sullivan, Margaret	Sp.,	—	Los Angeles
Sullivan, Mary Aileen	Jr.,	A	Fargo, N. D.
Sutherland, Lawrence E.	S.,	A	Anaheim
Swanson, Albert Emanuel	F.,	A	Selma
Swartzfager, Hazel Marie	J.,	A	Los Angeles
Swope, Percy A.	F.,	M	Anaheim
Sydnor, Charles Edward	Sr.,	A	Los Angeles
Takemoto, Kyhei	Sp.,	—	Los Angeles
Tannenbaum, David	F.,	A	Los Angeles
Tatie, Dr. Gladys	Sp.,	—	Los Angeles
Taylor, Allie Hallet	Sp.,	—	Los Angeles
Taylor, Elizabeth Margaret	J.,	A	Lankershim
Taylor, J. Arthur	S.,	A	Los Angeles
Taylor, Marjorie Hayes	F.,	A	Los Angeles
Taylor, Vennaris M.	F.,	A	Los Angeles
Taylor, Rose Edith	F.,	A	Los Angeles
Tenneson, Rosemary	Sr.,	A	Los Angeles
Terrell, Myrtle Minnie	Sp.,	—	Los Angeles
Teskey, Myrtle Eugenie	Sp.,	—	Los Angeles
Thayer, Mabel R.	Sp.,	—	Tropico
Thickett, Dorothy Patterson	S.,	A	Los Angeles
Thielcke, Rosalie M.	F.,	A	Los Angeles
Thielen, Lillian R.	J.,	A	Los Angeles
Thomas, Alma Marguerite	Sp.,	—	Los Angeles
Thomas, Mary Alice	S.,	A	Riverside
Thomas, Newell Elliott	F.,	A	Los Angeles
Thomas, Virden LeMoyne	F.,	A	Los Angeles
Thompson, Dorothy E.	Sp.,	—	Los Angeles
Thompson, Earle P.	Sr.,	A	Burbank
Thompson, Edna Kathryn	F.,	A	Fillmore
Thompson, Harlan Howard	F.,	A	Pasadena
Thompson, Jane Mary	S.,	A	South Pasadena
Thompson, Lynn Ira	S.,	S	Los Angeles
Thompson, L. Berta	F.,	A	Bearman, Missouri
Thompson, Nellie Mae	F.,	A	Downey
Thompson, William Irwin	Sr.,	A	Los Angeles



Thorman, Emma Lena	Sp.,	—	Tustin
Thurber, Floyd Frederick	S.,	A	Los Angeles
Thurner, George	F.,	S	Los Angeles
Thurston, Grace Edith	S.,	A	Los Angeles
Tipton, Cyril S.	Sr.,	A	Los Angeles
Titus, Dorothy	F.,	A	Glendora
Tobias, Hazel Naomi	Sp.,	—	Los Angeles
Todd, Nellie Elizabeth	Sp.,	—	Glendale
Tompkins, Roy Lee	F.,	A	Downey
Trapp, Hazel Mildred	F.,	A	Los Angeles
Trefethen, Gratia	Sp.,	—	San Pedro
Trefethen, Nettie Evelyn	Sp.,	—	San Pedro
Trotter, John Crawford	S.,	A	Dublin, Ireland
Truesdale, Bessie Beatrice	F.,	A	Dinuba
Truesdale, Lottie	Sp.,	—	Dinuba
Tsuda, Kazuya	Sr.,	A	Los Angeles
Tucker, Ada Burnham	Sp.,	—	Los Angeles
Tucker, Harold A.	F.,	A	Los Angeles
Turner, Esther	S.,	A	Los Angeles
Tuthill, Dorothy Ila	F.,	A	Morenci, Arizona
Teeter, Samuel M.	F.,	A	Tempe, Arizona
Twiss, Mary Ann	Sp.,	M	Los Angeles
Twomey, Serena M.	S.,	A	Alhambra
Twomley, Pearl Evelyn	F.,	A	Yucaipa
Tyler, Edith	Sp.,	—	Los Angeles
Unoura, Kojiro	Sr.,	A	Iwate-Ken, Japan
Vance, Blanch L.	S.,	A	Los Angeles
Van der Stempel, Arthur	S.,	A	Los Angeles
Van Dike, Florence	Sp.,	—	Long Beach
Van Vranken, Al Dayton	F.,	A	Los Angeles
Vales, Gonzalo Toledo	Sr.,	A	Kawit, Cavite, P. I.
Van Velzer, F. Clare	S.,	A	Los Angeles
Van Wyck, William	Sr.,	A	Los Angeles
Vaucke, Etoil Plumb	Sp.,	—	Los Angeles
Vawter, Nellie	S.,	A	Santa Monica
Veale, Anita Wilson	Sp.,	—	El Paso, Texas
Vermilyea, Stanley Thompson	S.,	A	Los Angeles
Vittum, Mrs. Willis Hall	Sp.,	—	Los Angeles
Vivian, Robert Evans	Sr.,	A	Los Angeles
Vollstedt, Anna M. D.	Sp.,	—	Los Angeles
Voorhees, Mildred Irving	Sp.,	—	Los Angeles

Wagner, Arnold Henry	Sp.,	—	Los Angeles
Wagner, Mrs. Winona	J.,	A	Los Angeles
Wagy, Wallace Park	F.,	A	Los Angeles
Wahrenbrock, Elmer N.	F.,	A	San Diego
Walden, Anna Wilma	Sp.,	—	Los Angeles
Walker, Annie Lou	F.,	A	Hemet
Walker, Bessie E.	Sp.,	—	Los Angeles
Walker, Charles Ziegler	S.,	A	Long Beach
Walker, Dorothy	F.,	A	Los Angeles
Walker, Dorothy Lillis	F.,	A	Los Angeles
Walker, Grace Emma	F.,	A	Springfield, Illinois
Walker, H. Lloyd	J.,	A	Ocean Park
Walker, Helen Yetta	J.,	A	Los Angeles
Walton, Elizabeth Neil	Sp.,	—	Los Angeles
Watkins, Warren M.	S.,	A	Los Angeles
Wallace, F. Elinor	Sp.,	—	Long Beach
Wallace, Helen Harriet	J.,	A	Los Angeles
Wallace, Ralph William	Sr.,	A	Los Angeles
Walton, Grace Agnes	Sp.,	—	South Pasadena
Warburg, Olaf Edward	F.,	A	Los Angeles
Ware, Carolyn Eleanor	F.,	A	Los Angeles
Ware, John Allen	J.,	A	Kingman, Ariz.
Warren, Leroy Alexander	Sp.,	—	Santa Ana
Watson, Alice Erwin	S.,	A	Mount Vernon, Ill.
Watson, Homer K.	Sr.,	A	Los Angeles
Watson, Mrs. Minnie T.	Sp.,	—	Los Angeles
Watson, Nita	S.,	A	San Bernardino
Watson, Ruth Lucia	J.,	A	Los Angeles
Watson, Walter Thompson	Sr.,	A	Los Angeles
Wattenmaker, Julius	F.,	A	Los Angeles
Webb, Vera L.	Sp.,	—	Los Angeles
Webber, William Taylor	F.,	A	Lemoore
Webster, Ella Grace	Sp.,	—	Los Angeles
Weipert, Bessie May	Sp.,	—	Lemore, Idaho
Weiss, Sherwin Benjamin	J.,	A	Los Angeles
Welch, Esther	Sr.,	A	Long Beach
Wellman, Coe R.	S.,	A	Anaheim
Wendt, Alvin William	Sr.,	A	Pasadena
Wendt, Harvey Frederick	J.,	A	Pasadena
Werner, Charles E.	F.,	A	Los Angeles
West, Minnie H.	Sp.,	—	Pasadena

Westhill, John K.	Sp.,	—	Los Angeles
Wetherby, Henry Visscher	Sp.,	—	Los Angeles
Wetherby, Marguerite Ethel	Sp.,	—	Los Angeles
Weyer, Clara Elizabeth	J.,	A	Faribault, Minn.
Whitcomb, Alvin C.	F.,	A	Monrovia
Whitcomb, Edwin Riley	F.,	M	Monrovia
White, Marie	Sp.,	—	Los Angeles
White, Mrs. Merta	J.,	A	Los Angeles
White, Narsa	F.,	A	Los Angeles
White, Rowena	F.,	A	Los Angeles
White, W. E.	Sr.,	A	Los Angeles
Whitehead, Anne M.	Sp.,	—	Los Angeles
Whiteman, Marion Elizabeth	F.,	A	Alhambra
Whiteside, Lois Estella	F.,	A	Los Angeles
Whiting, Ruth	F.,	A	Riverside
Whytock, Norman Robert	Sp.,	—	Los Angeles
Wickersham, Jessie B.	Sp.,	—	Los Angeles
Widman, Norman	S.,	A	San Pedro
Wight, Earl Hervie	Sp.,	—	Glendale
Wilcox, Paul Blaine	F.,	A	Long Beach
Wiley, Charlotte	Sp.,	—	Hollywood
Wilke, Julian Otto	Sr.,	A	Los Angeles
Wilkes, Josephine	J.,	A	Los Angeles
Wilkinson, Frank Harvey	Sp.,	—	Los Angeles
Wilkinson, Hazel Clare	Sr.,	A	Los Angeles
Will, Arthur Joseph	S.,	S	Los Angeles
Willard, Nancy Lee	Sr.,	A	Los Angeles
Williams, Clarence Tickner	F.,	A	Pasadena
Williamson, Edward Henri	F.,	S	Orange
Wilcox, Lutie Louise	Sr.,	A	Los Angeles
Willmert, Ellen Henrietta	F.,	A	Ontario
Wills, Ellender	Sr.,	A	Los Angeles
Wills, Rex	F.,	A	San Bernardino
Wilson, Gwynn Marvin	F.,	A	Pomona
Wilson, Harry K.	Sp.,	—	Los Angeles
Wilson, Howard William	F.,	A	Escondido
Wilson, Louis Burks	Sp.,	—	Los Angeles
Wilson, Venus Eleanora	F.,	A	Los Angeles
Wilson, Winfred Ernest	Sr.,	A	Escondido
Winbigler, Ernest Naylor	S.,	A	Santa Ana
Winstanley, Edward Guy	F.,	A	Olympia, Wash.

Winterroud, Ruby Mayme	S.,	A	Orange
Winters, Francis Joseph	S.,	A	Philadelphia, Pa.
Witherell, Grace Miriam	Sr.,	A	Los Angeles
Woehr, Ida B.	Sr.,	A	Los Angeles
Woehr, Reginald R.	J.,	S	Los Angeles
Woleben, Marion Lois	F.,	A	Los Angeles
Wonder, Irena Violet	S.,	A	Long Beach
Wood, Emma Lois	S.,	—	Los Angeles
Wood, Frances Ruth	J.,	A	Los Angeles
Wood, Mrs. Irene Lucile	Sp.,	—	Los Angeles
Woodhead, Charlene	Sp.,	—	Los Angeles
Woods, Harry C.	Sr.,	A	Los Angeles
Wooldridge, Lulu Mary	Sp.,	—	Glendale
York, Crie Telford	J.,	A	Venice
Work, Mary Isabel	S.,	A	Venice
Workman, Mary Julia	Sp.,	—	Los Angeles
Wrottenberg, Jeanette	Sp.,	—	Los Angeles
Wuesthoff, Elfride	F.,	A	Los Angeles
Yoder, Gertrude A.	J.,	A	Hemet
Yoshikawa, Ichiji	F.,	—	Los Angeles
Yoshinaga, Jenji	Sp.,	—	Los Angeles
Young, G. A.	Sp.,	—	Los Angeles
Zager, Clara	Sp.,	—	Los Angeles
Zeller, Melba	Sp.,	—	Los Angeles
Zeorian, Solomon	J.,	A	Los Angeles
Ziegler, Arthur Nicholis	S.,	A	Long Beach
Zimmerman, Albert Frederic	F.,	A	Riverside
Zimmerman, John Robert	S.,	A	Riverside
Zuck, John Monroe	S.,	A	Palms

## GRADUATE DEPARTMENT

**Note**—The abbreviation "H.S." refers to candidacy for the University Recommendation for the High School Teacher's Certificate; A.M." to the Master of Arts Degree.

Adams, Harry G., A.B.

Kansas Normal College, 1898.....Mathematics, H.S.

Ames, Mabel Ellen, A.B.

Beloit, Wisconsin, 1907.....Latin, H.S., A.M.

Ames, Ruth Ann, A.B.

Southern California, February, 1917.....Sociology, A.M.

Arnold, Martha Margaret, A.B.

Southern California, 1907.....English

Ashmore, Grace Isabelle, A.B.

Southern California, 1916.....Chemistry, H.S., A.M.

Austin, Daisy Morgan, A.B.

Southern California, 1916.....English, H.S.

Babson, Helen Corliss, A.B.

Vassar College, 1905.....Sociology, H.S.

Barnes, Elizabeth C., A.B.

Baker University, 1911.....Latin, A.M.

Barnes, Hubert Earl, Ph.B.

Redlands University, 1915.....Philosophy, H.S.

Batcheller, Helen M., A.B.

Leland Stanford Junior Univ., 1915.....History, H.S., A.M.

Bates, Edith M., B.S.

University of California, 1904.....Mathematics, A.M.

Baugh, Arline, A.B.

University of California, 1913.....English, H.S.

Baughman, Julia I., A.B.

University of California, 1916.....Spanish, A.M.

Beardsley, Alice, Ph.B.

University of Chicago, 1900.....English, H.S., A.M.

Beckwith, Raymond Burr, A.B.

Olivet College, 1912.....Biology, A.M.

Bennett, Mrs. Charlotte Kirby, A.B.

Southern California, 1916.....Chemistry, H.S.

Benson, Charles, A.B.

Southern California, August, 1916.....Philosophy, H.S., A.M.

Benson, Christine M., A.B.

Southern California, 1915.....Economics and Sociology, A.M.

Biddulph, Herbert Kemp, B.S.

Greenville College (Illinois), 1910.....Botany, A.M.



- Biffer, Mary Clover, B.S.  
Carthage College Institute (Mo.), 1894.....Education, H.S.
- Bishop, Ernest George, A.B.  
Southern California, 1915.....Economics, A.M.
- Bissell, Kenneth M., A.B.  
Yale University, 1907.....German, History, A.M.
- Bissiri, Attilio Albino, A.B.  
Southern California, 1916.....Chemistry, H.S., A.M.
- Blanchard, Mary Willard, A.B.  
Mt. Holyoke College, 1907.....History, A.M.
- Bloom, Margaretha Felicitas, A.B.  
Southern California, 1915.....German, A.M.
- Bloom, Elizabeth Mercedes, A.B.  
Southern California, 1915.....German, A.M.
- Blum, Edith, A.B.  
Southern California, February, 1916.....English, A.M.
- Bogan, Mrs. Phebe May, A.B.  
University of Arizona, 1911.....Spanish, A.M.
- Bogardus, Mrs. Edith M., B.S.  
Northwestern University, 1911.....History, A.M.
- Bolton, Hazel Marie, A.B.  
Smith College, 1914.....History, H.S.
- Bond, Bertha, A.B.  
Southern California, 1916.....German, H.S.
- Bonelli, William George, A.B.  
Southern California, 1916.....Economics, H.S., A.M.
- Bostwick, Genevieve, A.B.  
Southern California, 1916.....French, H.S., A.M.
- Bostwick, Hattie, Ph.B.  
Hamline University, 1912.....German, H.S., A.M.
- Bouelle, Frank August, A.B.  
Southern California, 1912.....Education, A.M.
- Boyd, Lillian C., A.B.  
Southern California, 1916.....English, H.S., A.M.
- Brode, Alverda June, A.B.  
Southern California, 1911.....History, H.S.
- Brooks, Alton M., A.B.  
Albion College, 1897.....History, A.M.
- Brown, Arthur Clifton, A.B.  
Southern California, 1915.....Education, A.M.
- Brown, Earl Travis, B.S.  
Southern California, 1916.....Physics, H.S., A.M.
- Brubaker, Nicholas J., A.B.  
Southern California, 1915.....History, A.M.
- Bruckman, Edith Louise, A.B.  
Southern California, 1909.....French, A.M.

Bundy, Sarah Elizabeth, A.B.

Leland Stanford Junior University, 1910.....Sociology, A.M.

Bunnell, Sarah Elecia, Ph.B.

Brown University, 1899.....German, H.S., A.M.

Burdorf, Sophie Margaret, B.L.

University of California, 1906.....German, A.M.

Burke, John Claus, B.S.

Loyola College (Baltimore).....Economics, H.S.

Burnham, Alice A., A.B.

Bates College .....History, H.S.

Burmeister, Emma M., A.B.

Southern California, 1910.....Latin

Burr, Clifford Fulton, A.B.

Southern California, February, 1916.....Spanish, H.S., A.M.

Burr, Harriett Kendall, A.B.

Northwestern University, 1907.....English, H.S.

Burr, Merrill Jackson, A.B.

Oberlin College, 1907.....History, A.M.

Byam, Kathleen Isabel, A.B.

Smith College, 1915.....English, H.S., A.M.

Claberg, Clay, A.B.

Southern California, February, 1917.....History, A.M.

Canepa, Mary Illeonora, A.B.

Southern California, February, 1916.....French, H.S., A.M.

Clark, Essie Maud, A.B.

Southern California, 1915.....History, A.M.

Clark, Herbert F., A.B.

Southern California, 1915..Sociology and Economics, H.S.

Clark, Lola Bliss, A.B.

Southern California, 1913.....English, A.M.

Clifford, George Edward, LL.B.

Missouri State University, 1907.....History, H.S.

Cochrane, Elvis Elroy, A.B.

Greenville College (Illinois).....History, H.S.

Colestock, Grace Bellange, A.B.

Southern California, August, 1916.....History, H.S.

Colestock, Mary Alice, A.B.

Southern California, 1915.....Economics, A.M.

Coller, Clara Jane, A.B.

Southern California, 1916.....English, H.S.

Cone, Gladys Myra, A.B.

Southern California, February, 1917.....Zoology, H.S.

Cook, Mabel Elizabeth, A.B.

Occidental College, 1916.....History H.S.

Cookman, Alfred, A.B.

Southern California, February, 1916.....Biology, A.M.

- Cooper, Alice C., A.M.  
Leland Stanford Junior University, 1908.....English
- Cooper, Belle, B.L.  
University of California, 1904.....English
- Corbin, Mary Ann., A.B.  
Occidental College, 1916.....English, H.S.
- Crabill, Hazel Dell, A.B.  
Southern California, 1916.....Botany, H.S.
- Craig, Harry L., A.B.  
Jarkio College (Mo.).....Mathematics, H.S.
- Cunningham, Mrs. Gertrude B., A.B.  
Otterbein College, 1907.....English, H.S., A.M.
- Daniels, Arthur Howard, A.B.  
Leland Stanford Junior University, 1915.....History, H.S.
- Daniel, Sarah Josephine, A.B.  
Southern California, 1916.....History, H.S.
- Davidson, Joseph George, A.B.  
Southern California, 1911.....Chemistry, A.M.
- Davies, Henrietta Alma, A.B.  
Southern Cal., Feb., 1916.....Economics and Sociology, H.S.
- Davison, Madeline Celia Leah, A.B.  
Southern California, 1914.....German, H.S.
- Deaver, Chas. Leon, A.B.  
Southern California, 1914.....History, A.M.
- Derby, Jesse R., A.M.  
University of Kansas, 1912.....English, H.S.
- Derr, Charles Haskell, A.B., A.M.  
Park College, 1903.....Education, A.M.
- Dexter, Earle Francis, A.B.  
Southern California, 1914.....Philosophy, A.M.
- Dodge, Alice Everett, A.B.  
State Normal College (Kansas).....History, H.S.
- Don Carlos, Jessica Blanche, A.B.  
Leland Stanford Junior University, 1912.....English, H.S.
- Dowling, Evaline, Ph.B.  
University of Chicago, 1905.....English, A.M.
- Dubin, Jennie, A.B.  
Southern California, 1916.....Chemistry, H.S.
- Dunbar, Florence, A.B.  
Leland Stanford Junior University, 1900.....English, H.S.
- Dunham, Inez Dorothy, A.B.  
Southern California, 1916.....Sociology, H.S.
- Dutcher, Thomas A., A.B.  
Whitman College, 1909.....Mathematics, H.S.
- Dutton, Mrs. Alpha Christian, B.L.  
Hardin University (Mexico, Mo.), 1898.....History

Early, Mrs. Della Totton, A.B.

Southern California, February, 1916....History, H.S., A.M.

Eaton, Ruth E., A.B.

Southern California, 1914.....Chemistry, H.S.

Eisenberg, Kate, A.B.

Southern California, 1916..Sociology and Economics, H.S.

Elliott, Loyd C., B.S.

University of Arizona, 1913.....Mathematics, H.S.

Epley, James Franklin, A.B.

Southern California, February, 1917.....Education, H.S.

Eveland, Ruth Lucile, A.B.

Southern California, February, 1916.....German, A.M.

Feeman, Ray Elizabeth, A.B.

University of California, 1916.....English, H.S.

Fisher, Helen Gertrude, A.B.

Susquehanna University, 1913.....Mathematics, A.M.

Fisher, Lillian Estelle, A.B.

Susquehanna University, 1912.....History, A.M.

Fitch, Myrtle Smyser (Mrs.), B.Litt.

De Pauw University, 1892.....Psychology, A.M.

Foster, Emory Alfred, A.B.

Southern California, 1915.....English, H.S., A.M.

Foster, Sidney Francis, A.B.

Occidental College, 1916.....History, H.S.

Frasher, Roscoe Leroy, A.B.

So. Cal., Aug., 1916..Sociology and Economics, H.S., A.M.

Freed, Morris, A.B.

Southern California, February, 1917.....Mathematics, H.S.

Freese, Theron, A.B.

Southern California, 1916..Economics and Sociology, A.M.

Fuknoka, Hajime, B.Econ.

Col. of Economics, Keio Gijaku Univ.....Economics, A.M.

Funderburgh, Isaac Vaughn, A.B.

Pomona College, 1916.....Sociology, H.S., A.M.

Furber, Marion Ruth, A.B.

Southern California, February, 1916.....Mathematics, H.S.

Gardiner, Dorothy Margaret, A.B.

Mt. Holyoke, 1911.....English, A.M.

Gatch, Sarah Etta, A.B.

University of California, 1916.....English, H.S.

Gaud, Margaret, A.B.

Southern California, 1916.....History, A.M.

Gaylord, Joanna Lanman, A.B.

Smith College, 1893.....History, H.S.

George, Harry Bushnell, A.B.

Southern California, 1916....Economics and Sociology, H.S.

- Gerber, Raymond Clyde, B.S.  
University of Redlands, 1913.....Chemistry, H.S., A.M.
- Gilbert, Mabel A., A.B.  
Southern California, February, 1916.....English, H.S.
- Gilson, Lewis Edward, A.B.  
Southern California, 1914.....Chemistry, H.S., A.M.
- Gleiss, Irene Edith, A.B.  
Southern California, February, 1916.....German, H.S.
- Goetz, Louisa Elizabeth, A.B.  
University of Iowa.....Geology, H.S.
- Goodsells, Joy G., A.B.  
Southern California, 1912.....Physics, A.M.
- Gray, Gretta Vera, A.B.  
Southern California, 1916.....Botany, H.S.
- Green, Eleanor Boynton, A.B.  
Southern California, 1915.....Zoology, H.S.
- Greene, Marion S., A.B.  
Southern California, 1915.....History, A.M.
- Gridley, Kate Louise, A.B.  
Leland Stanford Junior University, 1904.....Latin, A.M.
- Griffin, Sadie Adele, A.B.  
Pomona College, 1916.....Zoology, H.S.
- Gross, Harry Edward, B.S.  
College of City of New York, 1910.....Mathematics, H.S.
- Hansen, Anna M. K., A.B.  
University of Minnesota, 1911.....German, A.M.
- Hansen, Astrid J. A., A.B.  
Southern California, February, 1916.....German, H.S., A.M.
- Hartshorn, Edna, A.B.  
Pomona College, 1912.....German, H.S.
- Hatfield, Clara C., A.B.  
Southern California, 1914.....History, A.M.
- Hawes, Minnie Luella, A.B.  
Southern California, 1914.....English, H.S.
- Hawkins, Jessie Meredith, A.B.  
Southern California, 1916.....English, H.S., A.M.
- Hayden, Floyd Smith, A.M.  
Pomona College, 1912.....English
- Hazlett, Edith May, A.B.  
Occidental College, 1914.....History, A.M.
- Hedstrom, Esther Vendla, A.B.  
Southern California, February, 1916.....History, H.S.
- Heller, Lillian Erma, A.B.  
Whittier College, 1916.....French, H.S., A.M.
- Henry, Mabel Gertrude, A.B.  
Leland Stanford Jr. University, 1915.....Mathematics, H.S.



- Hensel, Emma Helene, A.B.  
University of Iowa.....German, A.M.
- Herring, Flora Abbott, B.S.  
University of Missouri, 1911.....Latin, A.M.
- Hibbard, Elizabeth, A.B.  
Southern California, 1915.....History, A.M.
- Hidden, Elizabeth, Ph.B.  
University of Redlands, 1912.....History, H.S.
- Higgins, Elmer, A.B.  
Southern California, February, 1916.....Zoology, H.S.
- Hills, Henry M., A.B.  
Oberlin College, 1898.....Chemistry, A.M.
- Hinsdale, William, A.B.  
Southern California, 1916.....History, H.S.
- Hocker, Cora Lavina, A.B.  
Earlham College, 1913.....English, H.S.
- Hoenshell, Hattie, A.B.  
Southern California, August, 1916.....Chemistry, A.M.
- Hogopian, John Edward, Ph.B.  
Yale University, 1913.....Mathematics, H.S.
- Holland, Leland William, A.B.  
Southern Cal., Feb., 1916.....Mathematics, Physics, H.S.
- Hollingsworth, Sylvia Adelina, A.B.  
University of Wisconsin, 1914.....English, H.S.
- Hollingsworth, Josephine Bacon, A.B.  
Tulone University, 1910.....English, A.M.
- Horton, Louise, A.B.  
Southern California, February, 1917.....History, H.S.
- Houk, George D., A.B.  
Southern California, February, 1916.....Education, H.S.
- Hughes, Frances Barnett, A.B.  
Otterbein University, 1907.....English, H.S.
- Hummel, Edward John, A.M.  
Columbia University, 1914.....History
- Hunt, Harry Weston, A.B.  
Southern California, 1916.....English, H.S.
- Hunt, John R., B.S.  
Michigan Ag. Col., 1914.....Mechanical Engineering, H.S.
- Hunter, Fanny, A.B.  
Southern California, 1913.....English, A.M.
- Hurlbut, Ethel Abbie, A.B.  
Southern California, February, 1917.....History, H.S.
- Ingersoll, Caroline Maude, A.B.  
Southern California, February, 1916.....History, A.M.
- Jameson, Emma, B.S.  
University of California, 1902.....Mathematics, French, A.M.

- Jansen, Cornelius, A.B.  
University of Nebraska, 1899.....Education, A.M.
- Jenkins, Rayel Bucyrus, A.B.  
Southern California, February, 1917.....Zoology, A.M., M.D.
- Jisoji, Tetsugai, A.B.  
Imperial University (Kyote), 1914.....Philosophy, A.M.
- Johnson, Alice Hannah, A.B.  
Smith College, 1905.....Botany, H.S.
- Johnson, Bonnie Clyde, A.B.  
Greenville College, 1911.....History, A.M.
- Johnson, Charles Sale, A.B.  
Occidental College, 1915.....English, H.S.
- Johnston, Allegra Ellis, A.B.  
Southern California, 1914.....German, H.S.
- Jordan, Everett, A.B.  
Whittier College, 1916.....Biology, H.S., A.M.
- Kaplan, Harry, B.S.  
Michigan State Agricultural College, 1914.....Forestry, H.S.
- Keen, Margaret Ann, A.B.  
So. Cal., Feb., 1917.....Mathematics, German, H.S., A.M.
- Kersey, Cleon, A.B.  
Southern California, February, 1917.....Education, H.S.
- Kersey, Vierling, A.B.  
Southern California, February, 1916.....Education; A.M.
- Keyes, Marien M., A.B.  
Northwestern University, 1909.....Latin, A.M.
- King, Ruby Mildred, A.B.  
Southern California, February, 1917.....English, H.S., A.M.
- Kirkman, Mrs. J. C. Fedson, B.S.  
Iowa State College, 1906.....English, H.S.
- Kitasawa, Sukeo, A.B.  
University of California, 1916.....Economics, A.M.
- Knape, Mrs. Olney Thompson, A.B.  
Southern California, 1916.....History, H.S.
- Krag, Alexander, A.B.  
Oklahoma Holiness College, 1913.....German, H.S.
- LaClair, Olive Rebekah, B.S.  
University of California, 1912.....Spanish, H.S.
- Langworthy, Lester Raymond, A.B.  
University of California, 1915.....Education, H.S.
- Lee, Emily Bouquet, A.B.  
Oberlin College, 1908.....Latin, A.M.
- Lee, Ettie, A.B.  
Southern California, 1916.....Sociology, A.M.
- Lickley, Ernest Jameson, A.B.  
Southern California, 1916.....Sociology, H.S., A.M.

Livernash, Leo Dean, A.B.

Southern California, February, 1917.....History, H.S.

Lloyd, Mrs. Bertha K., A.M.

University of Arizona, 1912.....Economics and Sociology

Lodwick, Dea, A.B.

University of Iowa.....Sociology and History, A.M.

Long, Jean Ward, A.B.

Leland Stanford Junior University, 1914.....History, H.S.

Long, Wilbur Harry, A.B.

So. Cal., Feb., 1916.....Economics and Sociology, H.S., A.M.

Lott, Emma Lee, A.B.

Baylor College (Texas), 1896.....History, H.S.

Lovejoy, Lena Goldsmith, A.B.

Southern California, February, 1917....History, H.S., A.M.

Lum, Maryette Hawley, A.B.

Southern California, 1916.....German, A.M.

McCloskey, Pearl Louise, B.S.

Columbia University, 1916.....Physical Education

McCurdy, Bernice Vivian, A.B.

Southern California, 1916.....Spanish, Sociology, H.S.

McDonald, George James, A.B.

Southern California, 1915.....Education, A.M.

McEuen, Virgil Lester, A.B.

Southern California, 1916.....History, H.S., A.M.

McGregor, Mae Kathleen, A.M.

University of Chicago, 1916.....German, H.S.

McIntosh, Donald Harold, A.B.

Occidental College, 1916.....History, H.S.

McIntosh, Samuel Chester, A.B.

Occidental College, 1916.....History, Economics, H.S.

McKelvey, Katherine Finley, A.B.

Occidental College, 1916.....History, H.S.

McMaster, Robert Neer, B.S.

Southern California, 1916.....Physics, H.S.

McMurry, Vera Lucile, A.B.

Marietta College, 1905.....English, A.M.

McNeely, John Knox, B.S.

University of Cal., 1908.....Electrical Engineering, A.M.

MacDuff, Esther, A.B.

Occidental College, 1913.....English, H.S.

MacIntyre, Carlyle Ferren, A.B.

Southern California, February, 1916.....English, H.S.

Maddocks, Florence May, B.S.

University of Kentucky, 1907.....Mathematics, H.S.

Magnuson, Edla Charlotte, A.B.

Southern California, 1916....Sociology, German, H.S., A.M.

Marks, Inez May, A.B.	
Southern California, Feb., 1916.....	History, H.S.
Marriner, Ernest Howe, A.B.	
Union University.....	Sociology, A.M.
Marshall, Mabel Blanche, A.B.	
University of Nebraska, 1915.....	Latin, H.S.
Mason, Helen Iris, B.S.	
Northwestern University, 1914.....	History, H.S.
Matthews, Mabel Laura, A.B.	
Mt. Holyoke, 1906.....	History, A.M.
Menn, Edna Irene, A.B.	
Southern California, February, 1917.....	French, H.S.
Merrill, Sewall Egbert, B.S.	
New Mexico Agricultural College, 1911.....	Agriculture, H.S.
Millar, Mrs. Louise Palmer, A.B.	
University of Nebraska, 1905.....	English, A.M.
Miller, Elnora Belle, A.B.	
University of Michigan, 1905.....	English, A.M.
Mills, Irene Pamela, A.B.	
Southern California, 1916.....	Mathematics, Sociology, H.S.
Min, Chan H., A.B.	
Southern California, 1916.....	Education, A.M.
Moll, Mary Danielia, A.B.	
University of California, 1916.....	History, H.S.
Moore, Camille Anne, A.B.	
Southern California, 1915.....	English, H.S.
Moore, Horace Wood, A.B.	
Baker University, 1913.....	History, H.S.
Mulvihill, Mary F., A.B.	
Leland Stanford Junior University, 1905.....	Latin, A.M.
Murray, Elva Elizabeth, A.B.	
Southern California, 1916.....	Sociology, H.S.
Myrick, Lydia, A.B.	
Southern California, 1909.....	English, H.S.
Nash, Mary Vera, A.M.	
University of Glasgow, 1914.....	German, Spanish, H.S.
Nattkemper, Leonard G., A.B.	
Southern California, 1914.....	Education, A.M.
Nelson, Elmer Serano, A.B.	
Southern California, Feb., 1917.....	Economics, H.S., A.M.
Nichols, Alma Parker, A.B.	
Southern California, February, 1917.....	English, H.S.
Nichols, Marjorie Parker, A.B.	
University of Minnesota, 1910.....	Latin, A.M.
Nicoll, Mrs. Alice Heber, A.B.	
Wellesley College, 1906.....	French, H.S.

- Noble, Dora Ursula, A.B.  
Southern California, 1914.....Botany, Zoology, A.M.
- Norris, Sidney A., A.B.  
Campbell College, 1914.....Sociology, H.S., A.M.
- Oakes, Mary Ethel, A.B.  
Southern California, February, 1917.....History, H.S.
- Olson, Emery Evans, A.B.  
Southern Cal., 1916....Economics and Sociology, H.S., A.M.
- Osberg, Rose, A.B.  
University of Washington, 1910.....History, H.S.
- Palmer, Raymond J., A.B.  
Whittier College, 1916.....Botany, H.S.
- Paxton, Charles Hugh, A.B.  
Leland Stanford Junior University, 1907.....Physics, H.S.
- Peasley, Mrs. Helen V., A.B.  
Leland Stanford Junior University, 1901..Physiology, A.M.
- Pentland, Gertrude Aileen, A.B.  
Southern Cal., 1916.....Economics and Sociology, H.S.
- Perkins, Frances Louise, A.B.  
Southern California, February, 1916.....Mathematics, H.S.
- Perkins, Neva Joanna, A.B.  
University of Oregon, 1917.....Education, H.S.
- Perry, M. William, A.B.  
Nebraska Central College, 1910.....History, H.S.
- Pesqueira, Louisa Charlotte, A.B.  
Southern California, 1916.....Spanish, H.S.
- Phelps, Grace Lilian, A.B.  
Southern California, August, 1916.....English, H.S.
- Phillips, Leslie A., A.B.  
University of Michigan, 1909.....History, A.M.
- Pierce, C. Edward, A.B.  
Southern California, February, 1917....Physics, H.S., A.M.
- Pinnell, Homer F., A.B.  
Southern California, 1914.....Sociology, A.M.
- Pinnell, Horace Frances, A.B.  
Southern California, 1914.....Education, A.M.
- Poore, Charles D., A.B.  
University of Minnesota, 1905.....Chemistry, H.S.
- Poore, Mrs. Mary Gray, A.B.  
University of Minnesota, 1916.....Chemistry, H.S., A.M.
- Porter, Roy, A.B.  
Southern Cal., Feb., 1916....Economics and Sociology, H.S.
- Potter, Walter Henry, A.B.  
Southern California, February, 1917.....English, H.S.
- Preston, Charles Walter, A.B.  
Colorado Teachers College, 1913.....English, H.S.



- Ramsdell, Ada H., Ph.B.  
University of California, 1890.....History, H.S.
- Ramsey, Walker McConnell, A.B.  
Southern Cal., 1916.....Sociology and Economics, A.M.
- Read, Wendell Phillips, A.B.  
Southern California, 1915.....History, A.M.
- Reaves, Bessie Franklin, A.B.  
Southern California, 1915.....Sociology, A.M.
- Rebber, Leland Lester, A.B.  
Southern California, 1916.....Chemistry, H.S., A.M.
- Richards, John A., B.S.  
Kansas State Ag. Col., 1909..Mech. Engineering, H.S., M.S.
- Richards, Margaret Winifred, A.B.  
Southern California, 1916.....English, H.S.
- Rickenhauser, Charles E., B. C.E.  
University of Michigan.....Mathematics, H.S.
- Roalfe, Margaret, A.B.  
Southern California, 1916.....Spanish, H.S.
- Roberts, Faith, A.B.  
Southern California, 1916.....English, H.S., A.M.
- Rogers, Blanche Kathleen, A.B.  
University of California, 1916.....English, H.S.
- Rowell, Virginia Fay, A.B.  
Southern California, August, 1916.....English, A.M.
- St. John, W. E., A.B.  
University of Oregon, 1912.....English, A.M.
- Salmans, Clara, B.S.  
Ohio Wesleyan Univ., 1909..French, Spanish, German, A.M.
- Salmans, Edith, B.S.  
Ohio Wesleyan Univ., 1909..French, Spanish, German, A.M.
- Sanderson, Nels Frederick, A.B.  
Southern California, 1914..Sociology and Economics, A.M.
- Sanger, Vesta, A.B.  
Lordsbury College, 1916.....Mathematics, H.S.
- Sarnighausen, Olga Antoinette, A.B.  
Southern California, 1916.....History, H.S.
- Sartori, Rosemary, A.B.  
University of Iowa.....English, A.M.
- Sasso, Mauro  
Institute Tecnico, Bari, Italy.....Mathematics, H.S.
- Satoh, Seiji, A.B.  
Southern California, January, 1917.....Economics, A.M.
- Savage, Henry I., B.S.  
Oregon Agricultural College, 1914.....Botany, H.S.
- Scheurer, Cora M., A.B.  
Whittier College, 1910.....English, A.M.

- Schmitt, Katherine Cecil, A.B.  
Southern California, 1915.....German, A.M.
- Schoch, Frank B., B.S.  
Pennsylvania State College, 1909....Civil Engineering, H.S.
- Seely, Marie Waterbury, A.B.  
University of Colorado, 1911.....English, H.S.
- Shearin, Nellie W., A.B.  
Southern California, February, 1917.....Latin, H.S.
- Shults, Myrtle, A.B.  
Southern California, February, 1916.....English, H.S.
- Shumway, Charles, A.B.  
Southern California, 1916.....Philosophy
- Siberts, Sarah Miriam, B.S.  
Northwestern, 1913.....History, H.S.
- Silver, Andrew Morgan, A.B.  
Southern California, 1915.....Spanish
- Smart, Ruth A., A.B.  
Leland Stanford Junior University, 1911.....English, H.S.
- Smith, Cordelia Madison, A.B.  
Leland Stanford Junior University, 1913.....English, H.S.
- Smith, Ethelynn Marie, A.B.  
Southern California, 1916.....English, H.S., A.M.
- Smith, Mabel Ella, A.B.  
Southern California, 1916.....Botany, H.S.
- Smith, William, A.M.  
University of Chicago, 1912.....Education
- Snowden, Mildred Emma, A.B.  
Southern California, 1916.....History, H.S.
- Snyder, Albert Byron, A.B.  
Southern Cal., Jan., 1917....Economics and Sociology, H.S.
- Snyder, Charles Heath, B.S.  
Valparaiso University, 1909.....Chemistry, H.S.
- Specht, Martha Helen, A.B.  
Southern California, February, 1916.....German, H.S.
- Steinberg, Vera, A.B.  
Southern California, 1916.....H.S., A.M.
- Stephenson, Clara C., A.M.  
Southern California, 1915.....English
- Stewart, Doris Train (Mrs.), B.S.  
Kansas State Agricultural Col., 1906....Mathematics, H.S.
- Stewart, Florence Dean, A.B.  
Leland Stanford Junior University, 1916.....History, H.S.
- Steininger, Nadine Margaretta, A.B.  
Leland Stanford Junior University, 1916.....History, H.S.
- Stiles, Mildred, A.B.  
University of Kentucky.....Mathematics, H.S.

- Stilwell, Katharine Harriet, A.B.  
Southern California, 1916.....Spanish, H.S.
- Stonier, Harold J., A.M.  
Southern California, 1916.....History
- Swarz, Florence Irma, B.S.  
Columbia University, 1915.....Household Arts, H.S.
- Swift, Claude Earl, A.B.  
Southern California, February, 1916.....Chemistry, H.S.
- Sykes, Ethel P., A.B.  
State University of Iowa, 1910.....English, H.S.
- Tanquary, Grafton Pettis, A.B.  
Southern California, February, 1916.....History, H.S., A.M.
- Taylor, Mrs. Emma M., A.B.  
State Teachers College of Colorado, 1915..Sociology, H.S.
- Teall, Robert James, A.B.  
Beloit College, 1900.....Sociology, A.M.
- Tenneson, Rosemary Elizabeth, A.B.  
Southern California, January, 1917.....Latin, English, H.S.
- Thomason, Mrs. Mary H., A.B.  
University of Iowa, 1898.....Botany, H.S.
- Thompson, Earle Price, A.B.  
Southern California, January, 1917.....History, H.S.
- Thorne, Elsie May, A.B.  
Southern California, 1915.....Mathematics, H.S.
- Thornton, Elizabeth Norbury, A.B.  
Lake Forest, 1911.....Mathematics, Latin, H.S.
- Tucker, Celia Elliott, A.B.  
Occidental College, 1912.....Latin, H.S.
- Tucker, John F., A.B.  
University of Kansas.....Education, H.S.
- Tunison, Burnell R., A.B.  
Southern California, Feb., 1916.....Chemistry, H.S., A.M.
- Vaughan, Floy Rita, A.B.  
Pomona College, 1916.....Spanish, H.S.
- Vaughan, Marion Melinda, A.B.  
Leland Stanford Jr. University, 1916.....History, H.S., A.M.
- Vennink, George Albert, A.B.  
Morningside College.....Economics and Sociology, A.M.
- Vivian, Robert Evans, A.B.  
Southern California, Jan., 1917.....Chemistry, H.S., A.M.
- Walker, Sydnor Harbison, A.B.  
Vassar College, 1913.....Economics, H.S., A.M.
- Walters, Jennie May, A.B.  
De Pauw University, 1916.....Latin, H.S.
- Watson, Walter Thompson, A.B.  
So. Cal., Feb., 1917.....Mathematics, Sociology, H.S., A.M.

- Weaver, Royal A., A.B.  
Southern California, 1906.....Spanish, H.S.
- Weld, Emma S., Ph.B.  
University of Chicago, 1910.....Sociology, H.S.
- Whalian, Olive Buckley, A.B.  
Southern California.....English, H.S.
- White, Frances Elizabeth, A.B.  
Syracuse University, 1913.....English, H.S.
- Wiebe, Peter J., A.B.  
Pomona College, 1915.....German, H.S.
- Wiggs, Hazel Helen, A.B.  
Southern California, August, 1916.....History, H.S.
- Wilkes, Mary Bernice, A.B.  
Southern California, 1916.....Zoology, H.S.
- Wilcox, Mark F., A.M.  
Park College, 1909.....English
- Wilkinson, George H., Ph.B.  
Central College (Mo.), 1890.....Physics, Chemistry, A.M.
- Willcox, Lutie, A.B.  
Southern Cal., Feb., 1917.....Sociology and Economics, H.S.
- Williams, Calvin Scott, A.B.  
University of Michigan.....History, Education, A.M.
- Wilson, Jean Hazel, A.B.  
Occidental College, 1916.....English, H.S., A.M.
- Wininger, Ruth, A.B.  
Southern California, Feb., 1916.....Zoology, H.S., A.M.
- Wood, Agnes, A.B.  
Southern California, 1915.....Mathematics, H.S.
- Woodbury, Anna Caro, A.B.  
University of California, 1915.....Spanish, H.S., A.M.
- Woodruff, Jay A., A.B.  
Southern California, 1916.....History, A.M.
- Woods, Walter Allen, B.S.  
Pennsylvania State Col., 1904.....Applied Mathematics, H.S.
- Yakeley, Leon, A.B.  
Occidental College, 1913.....History, A.M.
- Yarnell, William Avery, A.B.  
Union College, 1907.....Literature, H.S.
- Yoder, Clarence H., A.B.  
Manchester College, 1915.....Philosophy, H.S., A.M.

SUMMER SESSION, 1916

Adams, Harry G. (A.B.)	Benson, Charles
Adamson, Veda Howell	Benson, Christine
Aid, Frank D.	Bent, A. B.
Albright, Rena Venable	Bent, Mary Louise
Alexander, Evalyn V.	Berry, Abbie
Alvord, Grace Lucile	Biffer, Mary Clara (B.S.)
Alvord, Mabel Letitia	Bisbee, Melvin Owen
Ames, Mabel Ellen (A.B.)	Bissiri, Alfio
Ames, Ruth Ann (A.B.)	Bissiri, Attilio Albino (A.B.)
Anderson, Dorothy L.	Blackburn, Ethel T.
Anderson, Chloe Case	Blake, John Philips
Archbold, Bessie Frances	Bland, Maud H.
Armstrong, Beatrice	Bloom, Felicitas M. (A.B.)
Arnold, Max B.	Bloom, Mercedes E. (A.B.)
Arnold, Paul	Bloom, Mrs. Selma T.
Arnold, Martha M. (A.B.)	Blum, Edith (A.B.)
Ashmore, Grace I. (A.B.)	Boal, Louise Baxter
Ayers, Arthur Carlton	Bogardus, Mrs. E. M. (B.S.)
Bailey, Nellie Elizabeth	Boice, Maude
Baker, Mrs. Clara Duncan	Boice, Stella
Ball, Grace I.	Bolton, Lida May
Ball, Helen A.	Bostwick, Genevieve (A.B.)
Ball, John	Bowtelle, Frank A. (A.B.)
Ball, Margaret D.	Boulette, Emma
Barlow, Hugo	Bowen, Wayne Frank
Barnes, Elizabeth C. (A.B.)	Boyd, Lillian A. (A.B.)
Barnes, Herbert E. (Ph.B.)	Bradford, Sarah Alice
Barnes, Jessie B.	Bradley, Millie Parsons
Barton, Ralph Edward	Bretthauer, Gertrude F.
Baskett, Jettie	Briggs, Alfred Poyneer
Bass, Ethel Marie	Briois, Leonard D. F.
Batcheller, Helen M.	Broadbent, John Howard
Bates, Edith M. (B.S.)	Brodersen, Carl C.
Bauer, Aileen Day	Brooks, Altun M. (A.B.)
Bay, Ciella A.	Brown, Arthur Meade
Beatty, Irene Syfert	Brown, Earl Travis (B.S.)
Beckwith, Raymond B. (A.B.)	Brown, Ella Rachel
Behymer, Elsie Olive	Browne, Ray Edward
Belt, Lois Elizabeth	Brownell, Genevieve



- Brownell, Giles Corlis  
Browning, Helen  
Browning, Mary Leona  
Brubaker, Nicholas J. (A.B.)  
Bruce, Henry Webster  
Bruce, Mary Mitchell  
Brunn, Florence  
Bryson, John A.  
Buck, Leah Pearl  
Buckham, Mary H.  
Buckholder, Daisy  
Bullock, Albert Ernest  
Bullock, Frederick  
Burns, Daisy M.  
Burton, Mrs. Elizabeth E.  
Byrne, Loretta Petronilla  
Cable, Maud  
Calef, Evelyn L.  
Calkins, Lorna Ruth  
Campbell, Harold Harrison  
Campbell, Margaret M.  
Carlisle, Fred B.  
Carr, Harold Fremont  
Carr, William E.  
Cartwright, Eda Mary  
Cartwright, Royden Maxwell  
Casey, Frank Anthony  
Catey, Minnie Louise  
Cauthorn, Leah  
Chaddock, Gertrude  
Chamberlain, Iris Clark  
Chandler, Moses Willard  
Chase, Florence Zoe  
Chase, Raymond Eugene  
Cheek, Bertha  
Chenot, Paul F.  
Chislett, William, Jr.  
Choate, Nellita Naomi  
Chung, Elbert Yit  
Clark, Cora Bowen  
Clark, Jessie Lee  
Clark, Lola B. (A.B.)  
Clark, Wallace Clifford  
Coates, Grace Stone  
Coates, William Woodard  
Cobb, Ruby E.  
Collins, Leonard F.  
Colestock, Grace B. (A.B.)  
Coffin, George Hofman, Jr.  
Conaty, Catherine  
Conway, Adina M.  
Cookman, Alfred (A.B.)  
Cooper, Alice Cecilia (A.M.)  
Cooper, Anna  
Cooper, Belle (B.L.)  
Cooper, Vera May  
Coover, George Lynn  
Corbin, Mary Ann (A.B.)  
Corlitt, Eva  
Cornwell, Lena May  
Cowser, Vernon Read  
Craig, Harry L. (A.B.)  
Culbertson, George W.  
Culver, George Albert  
Cunningham, Gertrude B.  
(A.B.)  
Curran, Frederick Sutherland  
Curtis, Lucile Rose  
Cutler, Eda Tirzah  
Cutler, Evaline Pearl  
Cutler, Mary Elizabeth  
Dailey, Ross Hart  
Daley, Helen Inez  
Daniels, Arthur H. (A.B.)  
Daniels, Cora F.  
Daniels, Raymond E.  
Danielson, Laura C.  
Davidson, Margaret Grace  
Davidson, J. G.  
Davies, Christine A.  
Davies, Henrietta A. (A.B.)  
Davis, Rosa A.

Deaver, Charles Leon (A.B.)	Fergus, Mabel Elizabeth
De Camp, James Rice	Field, Elizabeth Maud
Delano, Alice Winifred	Fisher, Lillian E. (A.B.)
Del Valle, Mary E.	Fitch, Mrs. Myrtle Smyser (B.Litt.)
Derby, Jesse R. (A.M.)	Fitzpatrick, Harold Pierre
Desmond, Harold Francis	Forster, Kelliher Neslen
Desmond, Mary	Fortson, Gordon Russell
Dietz, Charles Louis	Foster, Emory (A.B.)
Dillin, Anna Ella	Frankfurt, R. W.
Dodge, Alice Everett (A.B.)	Franks, Grace
Doherty, Mrs. Sarah Patten	Frederiksen, Gerda
Dougherty, Eva May	Freed, Morris
Doughty, Julia Marie	Fulton, Hortense Lucile
Douglas, Maud Elvina	Gardiner, Dorothy M. (A.B.)
Douthit, Frances Laura	Gaud, Margaret (A.B.)
Dowell, Annie E.	Gaw, Mrs. Allison
Dowling, Evaline (Ph.B.)	Geiger, Essie
Drisko, Milton Clarence	Gerber, Raymond C. (B.S.)
Drost, Richard	Gervais, Gladys Mae
Dubin, Jennie (A.B.)	Gilbert, Hazel J.
Dunbar, Florence (A.B.)	Gilbert, Mabel Alice (A.B.)
Dunham, Inez Dorothy (A.B.)	Glantz, Geneva
Dunlap, Mary Elizabeth	Glick, Annette
Duque, Louis Lorenzo	Good, S. A.
Durham, Lewis Earl	Good, Sydney Vincent
Dutcher, Thomas A.	Goodwin, Mary M.
Dyar, Dorothy Margaret	Goodwin, Paul John
Dyck, John Paul	Gormley, Mrs. Harriet
Eaton, Ruth E. (A.B.)	Grabill, Gladys B.
Eisenberg, Kate (A.B.)	Gray, Gretta Vera
Elliott, Loyd C. (B.S.)	Greene, Marion S. (A.B.)
Elwin, Miss Gertrude P.	Gregory, Alice Elizabeth
Epley, J. F. (A.B.)	Gridley, Kate Louise (A.B.)
Esgate, Evelyn E.	Griffin, Herschel Raymond
Eskridge, Hinda Barry	Griswold, May Evangeline
Evans, Orilla May	Gunning, Alma E.
Evans, E. Manfred	Gurney, Barbara Elizabeth
Evart, John Lewis	Haber, Philip
Ewing, Ionia	Haisch, Howard John
Feeman, Ray Elizabeth (A.B.)	Hall, Norma Pierce
Fellows, Mary Janet	

Hammond, Mrs. Maud W.	Hofert, Esther Lydia
Hammons, Mabel	Holley, Helen Beauregard
Hampton, Mrs. W. E.	Holley, Mrs. Helena
Handley, Serena Bernice	Holley, Gertrude Lilian
Handy, Truman Bishop	Hood, Blanche
Haney, W. E.	Hood, Mary Katheryn
Hannum, Hortense Laura	Hoover, Elva
Hansen, Anna M. K. (A.B.)	Hopkins, Clarence Eugene
Hansen, Astrid J. A. (A.B.)	Horton, Ernest Horace
Harden, Donovan Franklin	Houk, George D. (A.B.)
Hardy, Faith	Howard, Mary Catherine
Harrison, Mrs. Jane	Hummel, Edward J. (A.M.)
Harrison, Mazie	Humphrey, Adele Alice
Hartshorn, Edna (A.B.)	Hunt, Elsie Mae
Harvey, Rowland H.	Hunt, John R. (B.S.)
Hatch, Mrs. Alice Hill	Hunter, Fanny (A.B.)
Hatfield, Clara C. (A.B.)	Huse, Lucy
Hawes, Minnie L. (A.B.)	Hutchinson, Emma Reynolds
Hawkins, Jessie M. (A.B.)	Hyde, Eva Maye
Hawkins, John Roland	Ingraham, Mrs. Jessie Edna
Hawkins, Walter R. G.	Isabelle, Sister Mary
Hayden, Floyd Smith (A.M.)	Iversen, Ida Christine
Hayes, Laura L.	Jackman, Madge Susan
Haymes, Diantha M.	Jacoby, Edgar H.
Hazlett, Edith May (A.B.)	Jameson, Emma (B.S.)
Healy, Herbert Lester	Jameson, Rachael
Hedstrom, Esther V. (A.B.)	Jansen, Christine F.
Helm, Marion Ruth	Javier, Emilio Cruz
Helm, Marjorie	Jenkins, Rayel B. (A.B.)
Henderson, Clifford William	Jennings, Mrs. A.
Hensel, Emma Helene (A.B.)	Jennings, Marion L.
Henson, Fred C.	Johnson, Amelia Caroline
Hibbard, Elizabeth (A.B.)	Johnson, Anna Bee
Hidden, Elizabeth (Ph.B.)	Johnson, Eliza Cosby
Higgins, Elmer (A.B.)	Johnson, Howard
Hill, Breta B.	Johnson, Marguerite H.
Hill, Jack C.	Johnson, R. P.
Hill, Marion	Johnston, Allegra E. (A.B.)
Hills, Henry M. (A.B.)	Johnston, Richard Lorimer
Hodge, Ruby M.	Jones, Doctor B.
Hoenshell, Hattie (A.B.)	Jones, Eleanor B.

- Jones, Rollin P.  
Jones, Thomas Brodie  
Jones, Wilson Stephen  
Jordan, Frank Everett  
Joy, Herman Charles  
Kaplan, Harry (B.S.)  
Kellogg, Rosita  
Kells, Blanche  
Kemp, Etheleen F.  
Kendall, J. H. S.  
Kennedy, Miss Eva L.  
Kennedy, Mrs. Theresa  
Kenny, Robert W.  
Kent, Evelyn May  
Kersey, Cleon  
Kersey, Vierling (A.B.)  
Keyes, Marien M. (A.B.)  
Kidwell, Helen C.  
Kim, Kwan Yon  
King, Ruby Mildred  
Kingery, Frances  
Kinsman, Julia Frances G.  
Kirchner, Elsie V.  
Kirk, F. Fay  
Kirkbride, Irene Margaret  
Klotz, Alice Wheeler  
Krag, Alexander (A.B.)  
Krause, Robert Alphonso  
Kuhnle, Helene Louise  
Lambert, Emily K.  
Lane, Edith Lucinda  
Lane, Elma L.  
Langworthy, Lester R. (A.B.)  
Larkey, Mrs. Marie A.  
Leach, Dorothy  
Leadingham, Grace Dorward  
Lee, Andrew B.  
Lee, Ettie (A.B.)  
Lee, Laura  
Lehr, M. Henri  
Leitch, Mrs. Kathryn  
Lewis, Charles Langford  
Lewis, Winnie D.  
Lickley, Ernest J. (A.B.)  
Lieberg, Helenita  
Link, Clarence W. B.  
Linn, Mary Seaman  
Lissner, Louis Meyer  
Lockett, Catherine J.  
Lodwick, Deca (A.B.)  
Logie, Helen Corita  
Long, Sam S.  
Lopez, Malvina  
Lorbeer, Elizabeth  
Loretto, Sister Mary  
Lovci, John Karl  
Lovejoy, Lena Goldsmith  
Lucas, H. G.  
Lucy, Anna Louise  
Lull, Sara Louise  
Lund, Le Val  
Lynch, Susanne Elizabeth  
Lyon, Arthur J.  
Lyon, Sarah Wildey  
McAdow, Ida B.  
McCleery, Grace L.  
McColloch, Maria Reed  
McCoy, John Carl  
McCulley, Alice Clare  
McCullough, Edward E.  
McDaniell, Jean  
McDermott, George A.  
MacDougal, Jean  
McEwen, Virgil L. (A.B.)  
MacIntyre, Carlyle Ferren  
McKenzie, Lizzie A.  
McKinnon, Ida B. Kirkman  
McMurry, Vera Lucile (A.B.)  
McNeese, Nora Lee  
McSpadden, Hiltrud Stager  
Mackey, Maryette Goodwin  
Maddocks, Florence M. (B.S.)

- Magoon, Mrs. Florence P.  
Mahan, H. W.  
Malloy, Estella  
Marks, Inez May  
Marshall, Gertrude  
Marshall, Mabel B. (A.B.)  
Martin, Eva E.  
Martin, Murrey Kerr  
Martin, Samuel Babbitt  
Mason, Marie Byrle  
Mason, Bessie H.  
Mason, Mildred Helen  
Matsuhara, Iwao  
Maurer, George Paul  
Merrihew, O. Lincoln  
Merrill, Sewall E. (B.S.)  
Messenger, Stella Mary  
Metcalf, Kenneth M.  
Meyer, Walter J.  
Miller, Harvey Augustine  
Milligan, Gertrude  
Mills, Irene Pamela (A.B.)  
Mills, Muriel  
Mitchell, Ann Mary  
Mitchell, Mary B.  
Moll, Mary Danielia (A.B.)  
Moore, Mrs. Celeste N.  
Moore, Horace Wood (A.B.)  
Moorman, Mrs. Janet Marie  
Morgan, Edith Joy  
Morgan, Jesse Josiah  
Morgan, Vera Marie  
Multer, Hugh J.  
Mulvihill, Mary F. (A.B.)  
Murakami, Peter Toranosuke  
Murphy, Anna McDermott  
Murphy, Mary Sheila  
Nash, Charlotte Ada  
Nash, Mary Vera (A.M.)  
Nattkemper, L. G. (A.B.)  
Neal, Arthur St. Clair  
Newbold, Austin Lawrence  
Newton, Geneva Louise  
Nichols, Alma Parker (A.B.)  
Nichols, Marjorie P. (A.B.)  
Nichols, Lois Laura  
Nicholson, Marian  
Noble, A. Rose  
Noeltner, Clarence Fred'k  
Nogle, Alta Grace  
Nordholt, William Francis, Jr.  
North, Therza Elizabeth  
Norton, Ramona Louise  
Ogawa, Kiyozumi  
Olmsted, Margaret Stanley  
Olsen, Bess  
Olson, Emery Evans (A.B.)  
Oneal, Charles Herbert  
Oneal, Gertrude  
Ormsby, Alvin Scott  
Osberg, Rose (A.B.)  
Osborne, Clara M.  
Palmer, Raymond J. (A.B.)  
Parsons, Dorothy Ann  
Patterson, Mary Estelle  
Patton, Stanley Flickinger  
Paxson, Beatrice M.  
Payette, Clara M.  
Peasley, Mrs. Helen V. (A.B.)  
Peck, Maybelle Claire  
Pentland, Gertrude A. (A.B.)  
Percy, Mary Fitzpatrick  
Perkins, Amy Seamans  
Perry, William M. (A.B.)  
Pesqueira, Louisa (A.B.)  
Peterson, Etta Louise  
Peterson, Mary Ellen  
Petree, Addie Marie  
Phelps, Grace L. (A.B.)  
Phillips, Jean Isabella  
Phillips, Leslie A. (A.B.)  
Pickering, Leland Lennell



- |                             |                              |
|-----------------------------|------------------------------|
| Pierce, Ruth                | Rodgers, Gladys Belle        |
| Pilibos, Alexander Stephen  | Rogers, Frances Louise       |
| Pinnell, Homer Francis      | Rosenbaum, Ethel Lorenza     |
| Place, Richard G.           | Rosenthal, Alfred G.         |
| Poore, Charles Delos (A.B.) | Rosenthal, Flora F.          |
| Poore, Mrs. Mary G. (A.B.)  | Rowell, Virginia Fay         |
| Porter, Roy (A.B.)          | Ryan, Frank Joachim          |
| Potter, Walter Henry        | Ryan, Theodore William       |
| Powers, Myrtle Grace        | Rykoff, Sarah                |
| Price, Edwin                | St. John, Mrs. Vivian        |
| Prickett, Sarah             | St. John, William E. (A.B.)  |
| Prindle, George H., Jr.     | Salcedo, Estanislao          |
| Puir, Elizabeth F.          | Sallstrom, Ada Margauretta   |
| Ramsey, Walker M. (A.B.)    | Salmans, Clara (B.S.)        |
| Rapp, Beryl                 | Salmans, Edith (B.S.)        |
| Rapp, Coral                 | Salud, E. B.                 |
| Rathwell, Thomas            | Saxton, Mary Emma            |
| Raybold, Mrs. Emma          | Schaufelberger, W. M.        |
| Read, Wendell P. (A.B.)     | Schmieding, Pauline Louise   |
| Reardon, William Francis    | Schmitt, Katherine C. (A.B.) |
| Reaves, Bessie F. (A.B.)    | Schoch, Frank B. (B.S.)      |
| Redding, M. Bell            | Schoeffel, Raymond           |
| Redway, Chauncy H.          | Scholl, Marguerite Julia     |
| Rehwold, Edith Louise       | Schorsch, Clara Joanna       |
| Reimbold, Henrietta M.      | Schroeder, Mary Gritzner     |
| Renny, Daniel               | Schwarze, Mary Louise        |
| Reinhard, Charles John      | Scott, Clifford C.           |
| Repath, Charles Jasper      | Seagrave, Ina E.             |
| Richards, Eileen Barker     | Sebastian, Charles F.        |
| Richards, John A. (B.S.)    | Sedweek, Edna Marguerite     |
| Richards, Marcella Louise   | Sexton, Andrew Donald        |
| Richardson, Mrs. Florence   | Seymour, Mrs. Sophie B.      |
| Rickershauser, C. E. (C.E.) | Shackelford, Frederick Henry |
| Richmond, Dean S.           | Sharpe, Edith Florence       |
| Rike, Kosine                | Shepard, Anne Loomis         |
| Riley, Gladys Almeda        | Shaw, Walter Porter          |
| Ritchey, Multie             | Shay, Carleton Carlisle      |
| Roberts, Faith (A.B.)       | Shidler, Lois Lillian        |
| Robertson, Luanna Christine | Shilling, Jerome Warren      |
| Robertson, Molly Charlotte  | Short, Frank Hamilton, Jr.   |
| Robinson, Hester Douglas    | Shultz, Myrtle (A.B.)        |

- Siebert, Alfred Adolph  
Siegel, Seymour J.  
Sigler, Grace Evangeline  
Silver, Andrew M. (A.B.)  
Simeral, Estella  
Skinner, Edna Eugenia  
Sletten, Theresa Cecelia  
Smart, Ruth A. (A.B.)  
Smith, Ethelynn M. (A.B.)  
Smith, Harold J.  
Smith, Margaret D.  
Smith, Margaret H.  
Smith, William  
Snyder, Albert Byron (A.B.)  
Snyder, Charles H. (B.S.)  
Sparkes, Callye Rebecca  
Specht, Martha Helen (A.B.)  
Spencer, Edith E.  
Spinner, Mabel Mary  
Sprague, Lenord Tower  
Sprenger, Florence Helen  
Steen, Emerald Jasper  
Stephenson, Clara C. (A.M.)  
Sterrett, Mrs. Pearl Breese  
Stevens, W. Leslie  
Steyer, M. Belle  
Stiles, Mildred (A.B.)  
Stilwell, Katherine H. (A.B.)  
Stowell, Mrs. Thomas B.  
Strand, Anna  
Struthers, Mrs. Alice Ball  
Sutherland, Mrs. Olga  
Swift, Claude Earl (A.B.)  
Sydnor, Charles Edward  
Tanquary, Grafton P. (A.B.)  
Taylor, Elizabeth Margaret  
Taylor, Mary M.  
Taylor, Prudence  
Thayer, Mabel Rozella  
Thomas, Abigail Veronica  
Thomason, Mrs. M. H. (A.B.)  
Thompson, E. G.  
Thompson, William Irwin  
Thomson, Carrie  
Thornton, Bess  
Thornton, Eliz. N. (A.B.)  
Thornton, Florence Hughes  
Thurston, F. L.  
Tucker, Celia Elliott (A.B.)  
Turner, Anna  
Van Aken, Gertrude Eliz.  
Van Camp, Mary  
Vallely, Mrs. Lorita Rouse  
Vaughan, Marion M. (A.B.)  
Virden, Melicent  
Wadsworth, Gladys Fern  
Wagner, Mrs. Winona  
Waldron, John H.  
Walker, Mary Lynn  
Walker, Sydnor H. (A.B.)  
Warner, F. E.  
Waterbury, Harriet Belle  
Watson, Homer K.  
Watson, Walter Thompson  
Watts, Zella Faith  
Weaver, Royal Arthur (A.B.)  
Webster, Ella G.  
Weld, Emma Skinner (Ph.B.)  
Whalian, Olive B. (A.B.)  
White, Mrs. M. E.  
White, W. E.  
Whitlock, Maud  
Whistler, John E.  
Whitock, R. G.  
Whitock, Mrs. L. T.  
Whytock, Norman Robert  
Wichman, Pauline Marie  
Widney, Ruth Johnson  
Wiggs, Bessie Mae  
Wiggs, Editha Eolia  
Wiggs, Hazel Helen (A.B.)  
Wiggs, Vera Liza

Wilcox, Mark E. (A.M.)	Wislizeenus, Lucy Carvell
Wilcox, Paul Blaine	Woehr, Ida Belle
Wilkes, Josephine Eugenia	Woehr, Reginald
Wilkinson, George H.(Ph.B.)	Wonder, Irena Violet
Willard, Nancy Lee	Wood, Agnes (A.B.)
Williams, Calvin S. (A.B.)	Woodbury, Anna Caro
Williams, Fern	Woods, Walter Allen
Williams, Louise A.	Woolery, Mrs. Zoe Zook
Williams, Texa Bowen	Wright, Joseph Hamilton
Wills, Leslie Le Moyne	Wright, Harold Alfred von
Wilson, Eric Randolph	der Heydt
Wilson, Grace Beula	Yarnell, William A. (A.B.)
Wilson, Jean Hazel (A.B.)	Yocum, Frank W.
Wilson, N. R.	Young, George Arthur

## COLLEGE OF PHYSICIANS AND SURGEONS

## Freshmen

Browne, Francis E. (B.S.)	Pascoe, Harold Edwin R.
Chambers, J. L.	Savage, Emerson Clark
Chung, Elbert Yit	Schroeder, Mrs. Mary G.
Cross, Harold Henry Unite	Sebastian, Charles Francis
Culver, George Albert	Walker, Robert Allyn (A.B.)
Garrison, Olin Herndon	Wallace, Donald Jos. (A.B.)
Hammons, Miss Mabel (A.B.)	Warwick, Charles Spurgeon
Jurans, Robert (B.S.)	Wilson, Eric Randolph
Kirkpatrick, Ross Corbett	Wilson, Theodore Roland
Nowrey, Jr., Joseph Edward	Woods, Ralph A.
Noyes, Lyman Wells	

## Sophomores

Bailey, Charles Albert	Johnson, Elmer H. (B.S.)
Beckett, Wilbur Archer	Kaplan, Max
Berman, Phoebus	Kintzi, Erwin Julius
Bertie, William James (B.S.)	Leonard, A. T. Jr. (A.B., B.S.)
Bowers, William Sidney	Lopizich, Ivo John
Brown, James Templeman	Otto, Lucie Ernestine
Chapman, James Lowell	Saunders, Cecil Allen
Conaty, Joseph Aloysius, Jr.	Schwarke, Katherine
Craig, Stephen A. (A.B.)	Smith, Gerald Fredoline
Damron, Milton Herbert	Smith, Munford
Dupree, Frederick F. (B.S.)	Spencer, Reuel Madison
Farrell, Joseph Webster	Stark, Leander William
Forster, Neslen K. (A.B.)	Steele, Mark Twain
Friend, Robert Snerman	Sutton, Irwin Coleman
Godshall, Leon Deane	Van Fleet, Harry Darwin
Herzikopf, Sam Sidney	Viole, Pierre Paul
Hobbs, Allen Thurman	Watkins, John Frank
Hohanshelt, Anna S. (A.B.)	Wescott, Virgil
Jenkins, Rayel B. (A.B.)	Zeiler, Joe

**Juniors**

Baron, Peter Paul	Murphy, William Roe (B.S.)
Biorkman, Claes Gustav A.	Rinehart, Miss Martha E. D. (A.B.)
Chapin, Charles Cox (B.L.)	Ryan, Clark David
Cochran, Richard Cocks	Schwartz, Edward Isador
Daly, Edward Joseph, Jr.	*Smith, Arthur Wells (A.M.)
Dickson, George Gillespie	Swantek, Casemyra
Felsenthal, Louis (D.D.S.)	Swartz, Rex Forest
Gallant, Peter Adolph	Takahashi, Teiji
Germon, Pierre Joseph	Talbot, William Thompson
Grant, Garnet Berke (B.S.)	Thompson, Harry Douglas
Hill, Jack Charles	Tice, Eldon Webb (A.B.)
Kessler, Ernest E. (A.B.)	Waters, Zura Orthello
Larson, Edwin	Whitlow, Leslie Willis
McCoy, Earl Tucker	*Deceased
McNealy, Mrs. F. E.	

**Seniors**

Anderson, James Fleming	Kaufman, Morris Philip
Andrews, Nina Wilhelmina	Levin, Harry
Beggs, James Henry	Lupton, Earl Lane
Breslin, Frank Jerome (B.L.)	Marsden, Samuel Arthur
Brown, Charles W.	Mellman, Clarence
Carson, William George	Mitchell, Harry Bolton
Conway, M. W. (A.B., Ph.G.)	Moody, Earl Egbert (A.B.)
Coodley, Oscar	Morrison, Maude Leontine
Cox, Edward Rochford	McClurkin, Arthur Archibald
Cunnane, Thos. Bartholomew	McDonald, Thomas Gregory
Fehrensen, Gail	McLaughlin, James Henry
Fosdick, Mildred E. (A.M.)	Norton, Archie Angus
Frank, Frances Pearl (B.S.)	Paulson, Archie Martin
Guidinger, William Emanuel	Pierce, Sterling Newton
Higginbotham, Gordon W.	Ramsay, Robert E. (A.M.)
Hoffman, Philip Block	Renfrew, John Beatty
Hubbard, Henry DeWitt	Robinson, Charles A. (B.A.)
Hutchinson, William Wilson	Rogers, Sherman
Judge, William Donald	Ruth, Roy Fred (A.B.)
Judy, Arthur Sinclair	Rynin, Simon Solomons



Schenck, George F. (A.B.)	Taylor, Frank Wm. Howard
Shea, John Russell	Wallace, Guy (A.B.)
Suski, Peter M.	Wells, Mrs. Maria Christina
Swancott, John	Wilson, Clair
Swartz, Bret Albert	

### Special

Sclanker, John Edwin (Special Junior)	Turney, Miss L. E.
Scoles, H. E.	Weis, Miss Carrie

### Post-Graduate

Kuroiwa, D. (M.D.)

## COLLEGE OF LAW

## Freshmen

Abrams, William	Brady, Herbert Funk
Adkisson, Arthur Preston	Braus, Irving
Ahlborn, John Frederick	Briedenbach, Homer Louis
Alexander, Maurice Alvin	Brockow, Anna
Alter, Richard	Brown, Errol Frank
Ankrum, Morris Winslow	Brown, Clarence William
Apperson, Gail Delbert	Brown, James Templeman
Arblaster, George Jeremiah	Brown, Richard Baxter
Armour, Samuel Lyle	Brown, William G.
Arnold, James Clinton	Bruce, George Orange
Atchley, Mary Gladys	Brunton, Arthur William
Avery, Clark Milton	Bryson, Frederick Robertson
Bachtell, Sidney Norris	Buckman, Frank Elmer
Bailey, Elmer Ellsworth	Burke, Frazee Franklin
Baines, Lyle Linus	Busker, Albertus Jacob
Baker, William Dale	Carnes, Grover Cloe
Bank, Louis Frederick	Camp, Edwin Lee
Barlow, Hugo Honen	Campbell, Charles George
Barnicle, Peter Joseph	Carnes, Grover Cleo
Barker, Renee	Cartzdafner, John Prose
Barker, Grace Farnsworth	Carvel, Mae
Barrett, James Taylor	Case, Gilbert Wentworth
Barrett, Jessie	Casiano, Angel Peeson
Bayley, Edgar A.	Clarey, Herbert Donald
Beal, Edgar R.	Clark, John Gee
Bedford, Stephen	Clayman, David Muriel
Benjamin, Pascal Paul	Clayton, Clarence Edgar
Bennett, Ray Lloyd	Coffman, Loyd Hamilton
Bernal, Alfonso Joseph	Coleman, Leslie Alfonso
Biscailuz, Eugene Warren	Colgan, William Lincoln
Black, Ralph Waldo	Colver, Seth Ingraham
Bonelli, William George	Comegys, Leonard Marin
Boosey, Kenneth Lloyd	Conner, Archie Robert
Borden, Frances Lynes	Conway, Paul F. A.
Boynton, Harold Law	Costello, Ruth Claire

- |                              |                           |
|------------------------------|---------------------------|
| Covington, Daniel Lennox     | Gaines, Paul              |
| Connolly, Joseph Patrick     | Gianquento, Joseph        |
| Conrady, Carl Louis          | Gibson, Huron Young       |
| Cornell, Ross Earl           | Gillespie, Forest         |
| Cox, Fred Millard            | Gilligan, John Andrew     |
| Cranston, Frederick Pitkin   | Glass, Maximilian         |
| Crop, William                | Glover, George Andrew     |
| Cunningham, Wyborn I.        | Glueck, Nathan H.         |
| Darby, L. L.                 | Goldsmith, A. A.          |
| Davis, Claude Everett        | Good, Clifford David      |
| Davis, Leland Stanford       | Good, Leslie Harold       |
| Deane, Thomas Clarke         | Gore, Jacob Charles       |
| De Costa, Douglas Richard    | Gotfredson, Ira Ben       |
| Dellamore, William           | Gould, Roscoe             |
| Denney, Charles Elmer        | Gratz, Jake Max           |
| De Vore, John Sweeney        | Gray, Lillian L.          |
| Dibbern, Owen Stanley        | Grebe, Emil               |
| Dinsmore, William Salisbury  | Grua, Clifford            |
| Dockweiler, Henry Isidore    | Hafner, William Thomas    |
| Doyle, Cecil Raymond         | Hagenbruck, R. E.         |
| De Bois, Ralph Waldo         | Hagerty, Robert Byron     |
| Durst, Walter Claude         | Hall, Everett Milton      |
| Dyer, George T.              | Hanley, Joseph John       |
| Edwards, James Clinton       | Harriman, Gray Chenowith  |
| Elwood, Ernest Anthony       | Haslett, Roy Lyon         |
| Enenkel, William Alexander   | Haun, Raymond Valentine   |
| Epstein, Henry Arthur        | Hawkins, Joseph Hennley   |
| Evans, Edward Manfred        | Heffron, William Isaac    |
| Faust, Leo Jackson           | Henneberry, Edward Joseph |
| Felt, Harold Edward          | Heron, Frank              |
| Finkenstein, Harry Aaron     | Herrick, George Ira       |
| Fisher, Eugene Irving        | Hiemenz, Bernard          |
| Fleming, Chester Scott       | Hilker, Walter Robert     |
| Follen, Betty                | Hodge, Raymond W.         |
| Fowler, Lester John          | Hoffman, Elmer Henry      |
| Fitzgerald, Clifford Lincade | Holcomb, Arthur Douglas   |
| Frampton, Jesse Jones        | Holcomb, Samuel Frost     |
| Friedman, Amos               | Holland, Cecil Deleval    |
| Fulton, John Minney          | Hollingsworth, James Clay |
| Fursee, Jacob Morris         | Holmes, Morton Arnold     |

- |                             |                              |
|-----------------------------|------------------------------|
| Honner, Robert Urleigh      | Lickel, Jessie Maud          |
| Hookstratten, St. Cyr Eddie | Lill, Paul Rix               |
| Horowitz, Samuel            | Lingle, Donald Harold, Jr.   |
| Hotchkis, J. Preston        | Lloyd, Gerritt John          |
| Hubbard, Alva Traver        | Long, Frank Raymond          |
| Hughes, Clifford Evans      | Lopez, Albert R.             |
| Hughes, Ray Albert          | Luckenbach, Harry Benjamin   |
| Hunter, Keith Carlton       | Lyon, Arthur J.              |
| Hutchison, William Clair    | Macfarlane, C. W.            |
| Huycke, Harold Draper       | MacGinnis, Francis George    |
| Javier, Emilio Cruz         | Machin, Charles Spéncer      |
| Jenkins, Leroy R.           | Mahan, Miles Marium          |
| Jennings, Barney Lafayette  | Manion, Francis Le Roy       |
| Joffe, Isaac                | Mann, Melvin Harold          |
| Jones, Albert Franklin      | Mann, W.                     |
| Jones, Lloyd Francis        | Marble, John McKinley        |
| Jouromsky, Mrs.             | Marcher, Ralph Hiram         |
| Kahan, Harry                | Marchetti, Roger             |
| Kelley, H. B.               | Martin, Carl Phillips        |
| Kellogg, Caroline Rachael   | Martin, Leslie Elwyn         |
| Kessler, Nicholas Alvin     | Mather, Howard Artemus       |
| Killeen, Edward Joseph      | McAleer, James Clarence      |
| Kincaid, Clarence Leslie    | McCartney, Florence          |
| King, John Felix            | McLay, Arch George           |
| Kinney, Harold Hile         | McPherson, Brown Shurley     |
| Kloess, Roland A.           | Meacham, Ray                 |
| Koll, Harvey William        | Merrick, J. W.               |
| Kurino, Toshisahuro         | Messenger, Lawrence Irving   |
| Kuyumjian, Khoren           | Mills, Bruce H.              |
| Lacey, Gladys May           | Miller, Harvey Augustine     |
| Langlois, Albert William    | Minton, Charles Robert       |
| Lauzier, Ernest William     | Miller, Edwin Woods          |
| Leake, Jasper Jay           | Montijo, Miquel Rodriguez    |
| Learned, Elbert Weston      | Morton, Robert Anderson, Jr. |
| Le Blanc, Florence          | Murray, Frank Forest         |
| Lehnhardt, Paul, Jr.        | Myers, Gerald Willis         |
| Leonard, Allan              | Myren, George Burt           |
| Leonard, Warren Holcombe    | Nairne, Kenneth Archibald    |
| Le Roy, Joseph Monroe       | Nathan, Robert Florance, Jr. |
| Levinson, Ben Louis         | Nathanson, Abraham Benj.     |

- Neuls, J. D.  
Newell, Ralph Amasa  
Newman, Albert Emerson  
Nishihara, H. S.  
Norton, Wallace Ulysses  
Nygaard, Valdemar Bjareki  
Oaklay, Clemmence Rebecca  
Olerich, Charles Bennett  
Olson, Lawrence E.  
Olson, Renel Leslie  
Olson, Robert Marcellus  
Packer, Joseph Holmes  
Parke, Walter Elliot  
Pennewell, Roy James  
Perkins, Voltaire  
Phillips, Jack Lawrence  
Phillips, John Jacob  
Phillips, Ralph Aubrey  
Pike, Bennette  
Porter, Jesse Bach  
Potter, Bernard Everal  
Potter, Newton E.  
Powell, Charles Arthur  
Porter, Benjamin Franklin  
Power, Clark Homer  
Prior, Gary Earl  
Prudhon, Harold Edward  
Ramirez, Louis Frank  
Randles, Clarence Andrew  
Redwine, Donald Macnale  
Reed, George William Sewill  
Remollo, Pacifico Rendon  
Roberts, Daisy  
Ronan, Hanorah Kathryn  
Ross, James Madison  
Saroyan, Aram Minas  
Scarborough, Horace P.  
Schoettler, Roland W.  
Selig, Gail Briggs  
Shaw, Arthur Leroy  
Shaw, R. E.  
Sherer, Robert Edgar  
Silverberg, Milton, Henry  
Simpson, Cecil  
Smith, Bertha Carolyn  
Smith, Clyde Watson  
Smith, F. Marion  
Smith, James Henry  
Smith, Linton Hinds  
Smith, Ridley Clark  
Smuckler, Elijah Mitchell  
Sprinkel, Walter Reed  
Sprague, Walter H.  
Squire, James Herbert  
Stack, Wickliffe  
Stannard, Leland  
Stark, Eldon William  
Stevens, Leslie Arthur  
Stewart, Oliver Paron  
Stickney, Howard Alonzo  
Stockwell, John C.  
Storey, Archie Edward  
Strang, Mark  
Struve, Heinrich Wilhelm  
Swain, Frank Graham  
Swanner, John Lynn  
Tarr, Leslie Riley  
Taylor, J. Arthur  
Thomas, William Perry  
Thompson, Earle Price  
Thompson, Peter Joseph  
Truman, Ida Evelyn  
Tromley, Samuel Earl  
Trythall, Tom Cree  
Tyree, Darwin Garrett  
Vaughan, Dale German  
Veon, Roland John  
Van Rossem, Walter John  
Van Vranken, Alfred Dayton  
Veloso, Juan Avila



Vermilyea, Stanley Thompson	Wickham, George Ramona
Vining, Florence Fenton	Widenham, John
Voss, Louis Alfred	Wiles, Lew Wilson
Wagner, Roy	Wilkie, Alfred Daniels
Wallace, Charles Daniel	Wilson, Harry Kirkpatrick
Wapner, Max Sam	Woehr, Ida B.
Ward, Chandler Paul	Wood; Harold Mitchell
Ward, John Edward	Work, Cree Telford
Ware, John Allen	Younkin, Paul Elbert
Ware, William Erham	Zimmerman, John Robert
Webber, Joseph Benjamin	

### Second Year Class

Alimisis, Liberius Eustathius	Carroll, Emmett Arthur
Alber, Arthur	Cheever, Sumner Charles
Ambrose, Thomas Lyford	Clock, John G.
Ames, Edwin Neal	Cohen, Alex
Baker, Girard Fred	Copland, Mab
Bank, Elliot Mantell	Cook, Clarence C.
Banta, Earl Lott	Creighton, Neal
Baltimore, Isidor	Crenshaw, Margaret McC.
Becker, Ernest August, Jr.	Davenport, Allen George
Beirne, William Bryan	Difani, Leonard Joseph
Berry, Reni Sylvanus	Dodson, James Hillsey, Jr.
Betz, Cecil Pearl	Doran, Mollie Louise
Blakeslee, Ralph Kennedy	Dorr, Donald G.
Blakiston, John Houston	Drain, Lulu M.
Bock, Mae C.	Eaton, Allan March
Booth, Claude Edwin	Eberhard, Claire Vivian
Bravender, Eugene Allin	Edwards, Noel Condiff
Brinck, Grace Bertha	Ellis, Daniel Eric
Briney, Perry Glenn	Esmilla, Sergis Zulaybar
Bulfinch, Mildred Gray	Fenimore, George W.
Burke, John Harley	Ferry, Hubert C.
Burns, Phil	FitzPatrick, Richard
Burton, John F.	Fowler, Walter Edward
Cain, Charles Henry	Fox, John G.
Campbell, James Watson	Freund, Leo
Cannan, Arnold Martin	Gallagher, Alfred J.

Garroway, Samuel Milton  
Glickman, David  
Hanlon, Thomas Patrick  
Haun, Fred Adoff  
Hardy, Oliver Carlos  
Hidey, Anna Maxwell  
Higgins, Harvey Garven  
Homan, George W.  
Holman, William Steele  
Home, John Douglas  
Humphries, Louis Kyle  
Irving, Louis John  
Ivins, Otto Hugnes  
Jacobs, Otto Arthur  
Jewell, Jeannette  
Johnson, Earl Edwin  
Jordan, Curtis Calhoun  
Keiser, Lloyd E.  
Kendall, Newton Jerome  
Kennicott, Kenneth Boyden  
Kendrick, Victor Hargrave  
Ketcherside, Hugh V.  
Kidder, Ralph Greely  
Kiggens, Harold Stanford  
Kimmel, Stanley P.  
Knight, Katherine Valentine  
Koenig, Victor Hubert  
Lane, Lewis Palmer  
Larson, Walter Alexander  
Leahy, Harry Joseph  
Leeson, Lloyd Steele  
Leitch, Constance  
Lewis, Guy  
Little, Walter James  
Lippold, Earl Oswald  
Love, Esther Irene  
Longcroft, Austin E.  
Lukens, Charles Edward, Jr.  
Luth, Fred  
MacMillan, Clifford James

Maguire, Patrick Jhon  
Mahan, Henry W., Jr.  
Malette, Frank Liven  
Marchetti, Joseph Carl  
Marks, Theodore William  
Marsh, Llewellyn Fay  
Marxen, Edward Henry  
Matlock, Laurence Vernon  
McBride, James Ackley  
McCarey, Thomas Leo  
McCreery, Maurice Elliott  
McKinnon, Morton Howard  
McNamee, Luke John  
McIntosh, Frazier  
Meyer, Syllas Slocum  
Mills, Frederick S. K.  
Miller, Lloyd **Oakley**  
Miller, Samuel A.  
Mitchell, Allen George  
Mitchell, James **Henry**  
Miyasaki, Shoji  
Mooney, James Junius  
Morrill, Clyde Herbert  
Mullins, Fla Graves  
Murray, Ray Albert  
Neeley, Ray Davis  
Negley, John Armand  
Nelson, Flora Belle  
Nix, George William  
Nix, Lloyd Stephens  
Olson, Emil A.  
Orfila, Ernest Roland  
Owens, Timon Evans  
Parker, Robert McDonald  
Pelzer, Isidor Archie  
Perluss, Abe  
Perry, Howard M.  
Perry, John Laird  
Peterson, Fred Eskild  
Phister, Jay Montgomery

Platz, Hugo	Starr, Jay Garland
Pope, James Harlan	Stephens, Robert Grainger
Porter, Bruce William	Stevenson, F. Josephine
Remollo, Proceso Rendon	Stoddard, Frank Wilcox
Richmond, Hedley	Stuart, Edward Ashleigh
Rifkind, Joseph H.	Sturzenacker, Carl Burnley
Ring, William Charles	Subith, Fred E.
Robertson, Maud	Teel, Courtney Augustus
Roche, Leonard James	Thiele, William Gustave
Rodden, Edward Jerome	Thomas, William L.
Ross, George Byron	Thompson, John Harry
Schaefer, Henry	Thompson, Paul Dean
Schaetzle, Arnold Frank	Thompson, P. J.
Scharnikow, Charles Henry	Thompson, Sewell William
Schlaegel, Clyde Elden	Thorne, Lester Cornelius
Schmidt, Justus John	Trask, Walter Folsom
Schmitz, Earl Donald	Tupman, Will Hamer
Sellberg, Harold Theodore	Turney, Raymond Irving
Semon, Louis	Veale, Anita Wilson
Shaw, Henry W.	Vilas, Ralph A.
Sheldon, Carlyl Mason	Walsh, Edward Earl
Shepard, Arthur Cyrus	Ward, Clarence Clifford
Sherman, Henry Sterling	Waters, Frank Joseph
Sigler, Elmer Gay	Weaver, Wiley Monroe, Jr.
Sindorf, Ralph Theodore	Werner, Erwin Peter
Sorensen, Walter	White, George C.
Southwick, Harold Irving	Williamson, William Roy
Smith, Hugh Bryan	Wilson, Richard
Smith, James Turner Roper	Whitson, Elmer Bruce
Smith, Mary Stanwood	Wilson, Joseph A.
Spiess, Louis Charles	Woodhead, Florence Miriam
Stahl, Robert John	Young, Milton

### Third Year Class

Africa, Bernabe	Blair, George DeLany
Anderson, William Vance	Blake, Samuel R.
Arnold, Max Barton	Blanche, Eugene H.
Banta, George	Brannick, Laurence
Beach, Earl C.	Breslin, George Montgomery

Brown, Ralph James  
Cameron, Don R.  
Carey, Kenneth Anton  
Clark, Earl W.  
Costello, James Patrick  
Crandall, William M.  
Delorey, Edward H.  
Durant, Harlan Edward  
Doyle, Clyde Gilman  
Dunn, John Carridon  
Emme, Otto Joseph  
Eshelman, Joseph Franklin  
Faucett, Carl Webb  
Fisher, Harold E.  
Follette, Channing  
Forbes, William Boomer  
Frincke, Martin Carl W.  
Gail, Sherman  
Gardiner, Everett S.  
Glass, Richard Charles  
Hardesty, Robert F.  
Haslett, Elmer Resides  
Herron, Mark Leo  
Hill, David A.  
Hille, Jere Greiner  
Holloway, Clayton Edward  
Horowitz, Fred  
Howlett, Elmer Horace  
Hunt, Arthur Richard  
Howe, Paul Taylor  
Hutchins, Alfred Tennyson  
Jacobs, Delmar Rogers  
Kadletz, Frank Sherman  
Kaufman, Louis  
Lenox, Edwin O.  
Lester, Will I.  
Lewis, Benjamin  
Lilley, Vernon W.  
Linneman, Hisko Meyer  
Mann, Ernest L.

Mansur, Fred  
Mason, Bruce W.  
McClellan, Harry Justus  
McCully, Earl Justus  
McIver, Paul George  
McNary, Hugh Alin  
McPike, George Vardeman  
Modesti, Phinoclad  
Nye, Clement DeWitt  
Partridge, Edwin Ellis  
Pawson, James Edward  
Pearson, Frederick Harold  
Peckham, Everett Robin  
Peipers, Paul  
Rives, Howard  
Roberson, Edwin Conway  
Rosenblum, Joe  
Rucker, Lyle Wilson  
Runkle, Clarence B.  
Sadickoff, Harry Gregory  
Sawyer, Elmer Ellsworth  
Schaefer, John Ludwig  
Sheldon, Albert Leverett  
Silverstone, Myron Wilk  
Silverstone, Seymour  
Smith, Frank MacPherson  
Smith, Fred  
Snyder, Beatrice Carolyn  
Stanton, Adrian Cornell  
Sterry, Philip Clinton  
Stone, LeRoy Russell  
Thomas, Clyde  
Tipton, Syril Sutton  
Todd, Newton M.  
Tomlinson, Herbert Morgan  
Van Why, Newton  
Vincent, Richard Lionel  
Welch, Richard Joseph, Jr.  
Wilder, Edward

**Post Graduates**

Costello, Evelyn J.  
Horowitz, Fred  
Shepherd, John Simeon

Tuttle, George Wilson  
Willebrandt, Mabel Walker

**Summer School**

Askenasy, Al  
Ahlborn, John Frederick  
Alber, Arthur  
Anderson, William Vance  
Arnold, Max Barton  
Barkelew, Elwood Henry  
Batkin, P. J.  
Bayley, Edgar A.  
Beckwith, Ruth Edna  
Benjamin, Pascal Paul  
Berry, Reni Sylvanus  
Black, Ralph Waldo  
Blakiston, John Houston  
Botsford, John William  
Boynton, Harold Law  
Bravender, Eugene Allin  
Brett, Arthur Thornberry  
Brannick, Laurence  
Briney, Perry Glenn  
Burns, Phil  
Burton, John F.  
Camp, Edwin Lee  
Cannan, Arnold Martin  
Carvell, Mae  
Chalgrene, Marie  
Clark, Carl Crittenden  
Clayton, Clarence Edgar  
Clock, John G.  
Coffman, Loyd Hamilton  
Comegys, Leonard Marin  
Conrad, E. G.  
Conway, Paul F. A.

Copland, Mab  
Cornell, Ross Earl  
Costello, James Patrick  
Crenshaw, Margaret McC.  
Davenport, Allen George  
Davis, Claude Everett  
Denny, Charles Elmer  
Difani, Leonard Joseph  
Douglas, W. B.  
Doyle, Clyde  
Drain, Lulu M.  
Durant, Harlan Edward  
Eddy, C. C.  
Edwards, Noel Condiff  
Ellison, Harry B.  
Emme, Otto Joseph  
Faucett, Carl Webb  
Fenimore, George W.  
Fisher, C. E.  
Follette, Channing  
Frampton, Jesse Jones  
Frincke, Martin Carl W.  
Garroway, Samuel Milton  
Gibson, Huron Young  
Gillespie, Forest H.  
Gillespie, F. T.  
Glass, Richard Charles  
Glueck, Nathan H.  
Goldsmith, A. A.  
Gore, Jacob Charles  
Grether, Myra Dell  
Hardesty, Robert F.



- Haun, Raymond Valentin  
Heffron, William Isaac  
Henneberry, Edward Joseph  
Herrick, George Ira  
Hertel, George Ira  
Hiemenz, Bernard  
Hill, David A.  
Hogan, R. L.  
Homan, George W.  
Horowitz, Fred  
Humphries, Louis Kyle  
Hutchins, Alfred Tennyson  
Jenkins, Leroy R.  
Jouromsky, Mrs. F. E.  
Kadletz, Frank Sherman  
Keith, Donald McKee  
Kendall, Newton Jerome  
Kidder, Ralph Greely  
Larson, Walter Alexander  
Leahy, Harry Joseph  
Leeson, Lloyd Steele  
Leitch, Constance  
Lenox, Edwin O.  
Lewis, Benjamin  
Lopez, Albert R.  
Machin, Charles Spencer  
Maguire, Patrick John  
Mann, Ernest L.  
Mann, William  
Mason, Bruce W.  
McClellan, Harry Justus  
McLay, Arch George  
McNamee, Luke John  
McNary, Hugh Alin  
Meacham, Ray  
Mitchell, Allen George  
Nishihara, H. S.  
Nix, George William  
Olson, Emil A.  
Owens, Timons Evans  
Partridge, Edwin Ellis  
Peckham, Everett Robin  
Peipers, Paul  
Perry, Howard M.  
Pettersen, Arvide Stephen  
Platz, Hugo  
Porter, Bruce William  
Purpus, Edward Charles  
Randolph, Percilla Lawyer  
Rilliet, Charles Eugene  
Ring, William Charles, Jr.  
Rodriguez, Arsenio Ernesto  
Rosenblum, Joe  
Rucker, Lyle Wilson  
Rudolph, William  
Runkle, Clarence B.  
Scarborough, Horace P.  
Schaefer, Henry  
Schlaegel, Clyde Elden  
Schaeztle, Arnold Frank  
Schmidt, Justus John  
Searle, Edwin Lorraine  
Semon, Louis  
Shaw, Henry W.  
Silverstone, Seymour  
Smith, Clyde Watson  
Smith, Frank MacPherson  
Smith, Fred  
Smith, Hugh Bryan  
Smith, Mary Stanwood  
Sorenson, Walter  
Spiess, Louis Charles, Jr.  
Stack, Wickliffe  
Starr, Jay Garland  
Stearns, Francis Ardell  
Steintorf, Paul Bower  
Stockwell, John C.  
Stevenson, F. Josephine  
Struve, Heinrich Wilhelm  
Teel, Courtney Augustus

Thomas, William	Van Why, Newton
Thompson, R.	Vilas, Ralph A.
Thorne, Lester Cornelius	Waters, Frank Joseph
Todd, Newton M.	Williamson, L.
Tomlinson, Herbert Morgan	Williamson, William Roy
Trask, Walter Folsom	Yeaza, Hide

## COLLEGE OF DENTISTRY

## Freshmen

Ammons, W. V.	Girdlestone, C. G.
Avedaghaian, A. M.	Glick, H. S.
Barnewolt, H. F.	Goodson, B. J.
Barr, M. F.	Graham, E. E.
Barton, R. E.	Gregory, R. G.
Bartzen, E. V.	Hansen, J. I.
Beagley, L.	Harden, D. F.
Berkowitz, E. J.	Hardy, P.
Bobbitt, C. M.	Harrison, W. W.
Boehm, A.	Hawks, C. B.
Boswell, C. C.	Hays, L. T.
Brown, O. L.	Hedrick, W. K.
Brown, W. W.	Heidner, V. L.
Bullard, O. K.	Heron, D. F.
Burton, C. N.	Hildreth, E. L.
Capps, H. E.	Hogeboom, F. E.
Carlisle, F. B.	Holland, F. M.
Carpenter, J. H.	Horn, D. L.
Colgan, F. W.	Howard, R. L.
Craig, W. H.	Jack, G. H.
Day, R. E.	Jacobs, D. E.
Dixon, C. P.	Juenger, A. D.
Dougherty, J. H.	Kellogg, B. B.
Dunn, R. G.	Kotera, K.
Durand, J.	Kroeck, F. L.
Eader, L. W.	Le Sieur, H. A.
Elliott, H. D.	Lipking, C. E.
Ellsperman, H. C.	Lucy, E. J.
Finley, J. B.	Magill, A. D.
Fleishman, G. W.	Martin, A. R.
Fletcher, J. W.	McClara, F. A.
Frasher, L. A.	McNaughton, D. A.
Freer, T. P.	Medlin, F. H.
Fried, E. R.	Meredith, J. T.
Gibson, J. F.	Merrill, K. W.
Gilbert, E. A.	Moody, J. C.

Morgan, L.  
Nance, H. N.  
Newcomer, J. R.  
Noble, C. W.  
Nordeen, O. J.  
Olds, K. C.  
Olincy, A.  
Parker, W. G.  
Petty, E. A.  
Phelps, G. A.  
Poppas, A. T.  
Pung, P. K.  
Reynolds, F. T.  
Roden, O. A.  
Rogers, R. M.  
Ross, B. E.  
Sams, M. J.  
Schildwachter, E. C.  
Schoonmaker, H. D.

Schoren, W. E.  
Sellwood, R. H.  
Smith, M.  
Stanley, J. W.  
Strong, R. B.  
Taylor, L. J.  
Tennis, P. C.  
Thompson, E. W.  
Titenson, F. E.  
Tsukifuji, F. M.  
Van Buskirk, G.  
Vawter, M. B.  
Vint, R. B.  
Werner, J.  
Wheeler, W. W.  
Wilkes, F. L.  
Wilkinson, F. R.  
Wilt, V. L. G.

### **Juniors**

Adair, H. S.  
Alvarez, H. H.  
Arnold, H. E.  
Arnot, M.  
Ballinger, S.  
Barnett, K. G.  
Barnhart, H. M.  
Baughman, L. M.  
Beebe, C. M.  
Berryhill, G. D.  
Blake, T. D.  
Bleak, S.  
Blythe, V. M.  
Brandriff, G. K.  
Brockett, D. E.  
Brown, G. E.  
Brown, H. I. Q.  
Carson, J. W.

Cobb, A. A.  
Disraeli, I.  
Dobson, O. C.  
Duey, H. P.  
Ehrenclou, E. R.  
Fallgren, P. A.  
Ford, H. A.  
Friedman, A.  
Garcia, G. F.  
Gea, W. J.  
Gonzalez, A. A.  
Hill, H. J.  
Haughawout, L. C.  
Hendriksen, E. H.  
Hook, A.  
Holubek, P. E.  
Ironmonger, J. L.  
Jones, C. W.

Karasawa, K.	Shay, W. W.
Krause, F. W.	Smith, A. A.
Levitin, A. W.	Smith, D. R.
Lichtenwalter, R. B.	Smith, V. J.
Lorenz, W. H.	Somerville, V. J.
Lush, R. A.	Springer, P. J.
McElvaine, H. H.	Sweningsen, W. S.
McIntyre, E.	Thee, E. J.
McMillan, R. D.	Thompson, M. J.
Menges, J. B.	Tistaert, G. A.
Miller, K. J.	Travis, W. G.
Morje, S. H.	Trumpower, H. H.
Murdock, L. H.	Vanasen, D. W.
Neves, R. D.	Vieille, A. C.
Nicholson, N. N.	Vogt, G. O.
Packard, E. S.	Volin, L. W.
Perner, L. H.	Warren, R. A.
Phillips, B. A.	Washburn, J. H.
Pierce, C. R.	Waters, J. E.
Planck, M. G.	White, G. W. E.
Ramage, G. R.	Whitesell, D. W.
Roberts, R. R.	Wondries, H. W.
Sanders, A. E.	Woodward, C. M.

### Seniors

Alexander, R. H.	Covert, S.
Armitstead, J. E.	Critchlow, R. F.
Ballard, C. P.	Davis, R. O.
Beesemyer, N. L.	Eames, J. E.
Blurock, E. W.	Ellsperman, G. A.
Bogart, J. C.	Epstein, E. C.
Brown, C. H.	Feldman, I.
Brownson, E. M.	Foster, F. B.
Buehren, W. J. C.	Gay, V. J.
Casebeer, C. R.	Gibbs, H. E.
Chatterton, V. W.	Gould, C. G.
Cole, C.	Greef, C. O.
Connelly, J. T.	Gum, F. W.
Cook, A. G.	Guth, W. E.



Hawke, E. J.	Purviance, S.
Haycraft, M. S.	Ramsaur, E. E.
Hill, Frank J.	Reese, B. L.
Holcomb, H. V.	Rush, D. D.
Holcombe, P. T.	Saito, D.
Howard, J. M.	Sakamoto, D. E.
Hutchason, L. B.	Scholz, E. E.
Kent, A. J.	Schwamm, J. A.
Kurata, T. H.	Schwartz, A.
Kurisaki, H. I.	Scott, N. H.
Lardner, W. C.	Scruggs, J.
Larson, R.	Siever, L.
Leavitt, J. G.	Slater, R. B.
Liddle, F. W.	Smith, W. E.
McElwee, J. W.	Snyder, J. W.
Miller, J. C.	Standefer, H. F.
Mitchell, H. L.	Stibolt, J. P.
Montgomery, F. C.	Stoker, J. O.
Moon, T. L.	Straub, H. L.
Nielsen, L. P.	Wessell, E. H.
Niisato, I.	Whipple, H. A.
O'Brien, R. F.	Williams, C. H.
Petersen, H. P.	

## COLLEGE OF THEOLOGY

- Bridge, David A. (J.)  
Butters, Archibald D. (J.)  
Chaffee, Ralph Horace (M.)  
Cleghorn, Walter Thomas (J)  
Cleghorn, Walter Thomas (J.)  
Dashiehl, James R. (Sp.)  
Dexter, Earl F., A. B. (J.)  
Edwards, Smith E. (Sp.)  
Engle, John Henry, A. B. (J.)  
Freels, James L. (Sp.)  
Gschwend, Carl (J.)  
Haberman, Samuel S. (J.)  
Haigh, Edgar M. (J.)  
Haydock, Earl H., A. B. (Sr.)  
Hovey, Byron P. (J.)  
Hughes, Alfred J. (Sr.)  
Hong, Chi P. (Sp.)  
Johnson, Amelia C. (J.)  
Johnson, Robert D. (Sp.)  
Jones, Russell S., A. B.  
Kaler, William W. (J.)  
Kelsey, James C. (J)  
Kim, C. S. (Sp.)  
Kline, Leo C. (J.)  
Knight, Charles L. (Sp.)  
Lamport, Warren D. (J.)  
LaPorte, William R.,  
A. M., (J.)  
Lightner, Earnest E.  
A. B., (J.)  
Malan, William E., A. B.  
(Sr.)  
Miners, Ernest A. (J.)  
Mumper, William H. (M.)  
Murakawi, Peter T. (J.)  
McIntire, Warren C. (M.)  
Nelson, Miles G. (M.)  
Ogawa, K. (Sp.)  
Oda, Kohiro (Sp.)  
Peterson, Marcus H. (Sp.)  
Reynolds, Luther G. (M.)  
Roberts, Andrew F. (J.)  
Spaulding, David M. (J.)  
Schubert, Will (J.)  
Stagg, Samuel W. (J.)  
Thomas, Virden L. (J.)  
Traveller, Gilbert B. (M.)  
Trotter, Frederick B. (J.)  
Vennink, George A., A. B.(J.)

## COLLEGE OF PHARMACY

### JUNIOR

Abel, Belton Cutler	Marshall, Charles E.
Adams, Louie Mae	Matthaes, Wickliffe, Jr.
Anderson, John C.	Mazy, Leon Louis
Awe, Emma Louise	McDonaugh, Edith
Blair, Leland C.	Miller, George Byron
Bower, Carlyle	Murata, Tatsuno
Brown, Paul P.	Ozeki, Zenija
Craig, Leslie	Perrelet, Raoul Albert
Curry, W. J.	Pratt, Harold Ernest
Czerniawski, E.	Prewett, Hite
Delany, Oliver William	Putnam, Lilas Ross
Diebold, Clarence Andrew	Quertermous, Sam W.
Doyle, I. Francis	Ransdell, Davis LaRue
Ewins, Edith Mary	Reade, Harold Leslie
Fairchild, Leslie	Robbins, Robert Samuel
Fielding, Theodore Arthur	Sanderson, George Clifford
Flynn, John Lawrence	Sarrail, Albert John
Frank, Ray Galbot	Snow, Guy
Frasher, Harold B.	Spear, Irvin Edward
Gunter, Raymond R.	Stone, Harry E.
Harris, Keith Edwin	Thomas, Virden LeMoyne
Hill, Stanley Read	Thompson, Harold B.
Isleib, Raymond Morris	Ting, Schiller
Kine, Frank	Veiner, Charles E.
Laurence, H. Grosvenor	Walsh, Francis A.
Lippman, Nathan	Watanabe, Rokuro
Loyd, Elmo	Wonder, P.
Maas, Harold	Ziebur, Mack Charles

### SENIOR

Ashcroft, John R.	Doty, John E.
Ball, Robert Alfred	Gilhousen, Wendell Phillips
Brownfield, Hermann	Gray, Norman E.
Carrick, Edna	Haviland, Stephen Andrew
Daniels, H.	Heying, Fred

Ishizuka, K.

Iwanaga, Kuchi Karl

Kojima, Taeko

Leader, William Anthony

Moore, Wallace W.

Nakamura, H.

Peterman, E.

Spaulding, Clair D.

Shimmin, Howard

Sterz, Walter Edwin

Stone, Perry

Thomas, C. DeWitt

Thorman, Emma L.

Wright, Joseph Hamilton

Yoshifuku, T.

## COLLEGE OF MUSIC

Abbott, Nettie	Burns, Corrine
Abraham, Leslie	Byerly, Mrs. J. H.
Adams, Ruth	Campbell, Helen
Alber, Edith	Carner, Cuba
Alderson, Harriet	Carner, Catherine
Anderson, Mrs. John	Caruthers, Emil
Anderson, Stanley	Casebeer, Lloyd
Armbrust, Norma	Chaffee, Herbert
Atwater, Margaret	Chase, Miss A.
Ayers, Mrs. Lillian	Chew, Mrs. Iva
Aylor, Mrs. Frances	Clabaugh, Ada
Bailey, Mrs. Marie	Clark, Donald
Baker, Floyd	Clark, Mrs. Ruth
Baker, Mrs. J. E.	Clever, Mabel
Ball, Louis	Cogswell, Golda
Barnes, Lucile	Collison, Clyde
Becket, Naomi	Coykendall, Florence
Benedict, Florence	Craig, Mary
Bennett, Mrs. Mary	Crain, Earnestine
Benson, Gunhilde	Culver, George
Betz, Mamie	Culver, Mabel
Bissiri, Attilio	Cunningham, Irene
Bokenkroeger, Edith	Davis, Robert
Boettger, Alma	Deets, Blanche
Boones, Mrs. C.	Dembowsky, Rebecca
Botsford, Carol	DeMuth, Helen
Bowdle, Mrs. A. M.	Denning, Virginia
Bowen, Louise	Denny, Mrs. Ruby
Boyd, Edna	Deuel, Star
Boyd, Jessie	De Vuiney, Gladys
Boyd, Mary	Dick, Margaret
Boynton, A.	Diveley, Rhea
Brandvig, Lillian	Dolly, Marian
Brice, Lena May	Donnersteg, Mrs.
Brockett, Mrs. Z.	Dugdale, Mrs. R. J.
Bruce, Grace	Duncan, Katherine
Bryant, Clifton	Duncan, Zetie



Duus, Viola  
Dyer, Lois  
Dyrenforth, Marjorie  
Edmiston, Ruth  
Emery, Waunita  
Emmerson, Mrs.  
Epley, J. F.  
Espy, Herbert  
Eveland, Ruth  
Falkenstein, Stanley  
Fay, Hester  
Fay, Pearl  
Ferguson, Mrs. Eleanor  
Ferrahian, Mrs. Eunice  
Forsblad, Arthur  
Forsblad, Ruth  
Foster, Eva  
Frahm, May  
Fuller, Miss E. W.  
Furber, Marian  
Gardner, Dorothy  
Garrison, Dorothy  
Gillette, Ruby  
Gould, Rita  
Green, Gilbert  
Hagar, Theodora  
Haller, Walter  
Hartfield, Lilla  
Healy, Winifred  
Heinze, Clara  
Hersey, Gertrude  
Hewitt, Bernice  
Hilend, Martha  
Holtzman, Helen  
Hunley, Annette  
Iden, Zepha  
Ignatius, George  
Ihm, Eartha  
Jackson, Sidney  
Jensen, Edith

Jessurum, Jeanette  
Jessurum, Johanna  
Jones, Mrs. A. V.  
Johnson, Reginald  
Johnson, Lillis  
Jewel, Mrs. Olive  
Kaiser, Bernice  
Kelly, Florence  
Kern, Faye  
Kern, Mrs. F. B.  
Ketcheson, Pauline  
Kling, C.  
La Fontaine, Merrill  
Lanning, Emma  
Latchford, Mrs. W. J.  
Leitzau, Emily  
Lennox, Catherine  
Leslie, Ely  
Leslie, Mildred  
Listman, May  
Litterer, Bessie  
Locke, R. V.  
Lovell, Alta  
Luard, Mrs. L.  
Lutes, Pearl  
Lyon, Gretchen  
Maier, Carol  
Mang, Mrs. Catherine  
Mang, Mrs. Fred  
Marsom, Ivy  
McCracken, Miss Lucile  
McCroskey, Josephine  
McCullough, Mrs. Ida  
McCully, Florence  
McFaddin, Claude  
McKee, Mrs. C. S.  
McKinley, Mrs. Hazel  
McQuin, Guelph  
Meger, Hulda  
Meier, Helen

Meier, Mildred	Sandersfeld, Norah
Merryman, Mrs. Ruth	Savage, Fay
Miller, Mrs. Mabel	Saxman, Clara
Mintner, Katie	Schaaf, Clara
Mizener, Dacotah	Schoeller, Marjorie
Monfort, Jean	Schmidt, Camilla
Morehouse, Mrs. W. R.	Schwab, Harold
Moreland, W. H.	Scott, Oriole
Murphy, Imogene	Sesina, Frank
Murray, Elva	Shutt, Ethel
Nagal, Kenneth	Silvius, Mr.
Nelson, Ruth	Simpson, Mrs. G. M.
Newman, Flora	Skeelee, Elizabeth
Nickey, Jeanette	Smith, Edna
Nudd, Florence	Smith, Lucy
Ono, Hirashi	Smith, Ruth
Orphat, Margaret	Snow, Miss
Ossian, Ruth	Solomon, Dorothy
Palmer, Bertha	Sparkes, Philura
Parker, Erma	Speicher, Elizabeth
Parker, Lucile	Stanton, Edna
Pearson, B. H.	Steward, Katherine
Pellicciotti, Joe	Steward, Wendill
Peterman, Albert	Storey, Mrs. Faith
Peterman, Donald	Sunkel, Walter
Peterman, Vivian	Taensing, Frances
Poduje, Louis	Tanaka, Shio
Potter, W. H.	Tanquary, Frances
Potts, J. R.	Tener, Mrs. Lela
Price, Ellen	Terrell, Lena Moss
Price, Mary	Thompson, Earle
Rebhan, Pearl	Thompson, Edna
Reddout, Marjorie	Thorpe, Helena
Reeks, Gladys	Titus, Dorothy
Rees, Lois	Tousley, Mildred
Reuther, Mrs. John	Umstead, Mrs. Leon
Roach, Mrs.	Urbekeit, Imma
Robertson, Mrs. Blanche	Utter, Marion
Rogers, Islay	Utter, William
Russell, Ruth	Vanderveer, Janey

Vermilyea, Stanley  
Viriden, Ruth  
Wagner, Lillian  
Waldie, Mrs. Lillian  
Wallace, Marion  
Wallace, Ralph  
Webb, Madeline  
Weber, Agnes  
Weipert, Bessie  
Wellman, Luna

Wendt, Emma  
Whitcomb, Wanda  
White, Dorothy  
Willard, Constance  
Willmart, Ellen  
Wilkes, Mary  
Wilson, Jessie  
Wright, Corrine  
Wyatt, Emma  
Yates, Spencer

## COLLEGE OF ORATORY

### PRIVATE LESSON STUDENTS

Agor, Bessie	Lieberg, Helenita
Anderson, Grace	Mason, Mildred
Becker, Marie	McCrea, Iola
Brown, Vesta	Millar, Cheryl
Bryant, Suzanna	Miller, Elnora
Carleton, Ella	Mizener, Ruth
Case, Irma	Muckian, Ruth
Comstock, Marion	Nesbit, Eugene
Constant, Claribel	Olds, Margaret
Crowther, Rhea	Pierce, Margaret
Edwards, Margaret	Rosin, Ethel
Estes, Helen	Smith, Mabel
Geary, Inez	Sneve, H. A. B.
Giffen, Marguerite	Solomon, Dorothy
Gunning, Alma	Stilwell, Katherine
Gurney, Barbara	Strait, Lyla
Henrickson, Althea	Van Grove, Terese
Hubbard, Virginia	Voorhees, Mildred
Hughes, Faye	Wadsworth, Gladys
Hummel, Lucy	Walker, Grace
Jackson, Bernice	Walker, Marjorie
Jackson, Marie	Wallace, Helen
Jamgochian, Araxie	Welch, Esther
Kinder, Evelyn	White, Rowena
Kirby, Charlotte	Woodhead, Charlene
Knecht, Marjorie	

### CLASS

Adams, Doloris	Arthur, Ruth
Adler, Marian	Askin, J. M.
Agor, Bessie	Austin, Daisy
Albright, Esther	Bailie, Ruth
Anderson, Cora	Bainbridge, Eulalia
Anderson, Grace	Baker, Beatrice

Barnes, Maud L.	Dolly, Lois
Barnett, Elsie	Duke, Mrs. Z. K.
Barre, Myrtle	Dunlap, Mary
Bates, Mrs. H. W.	Eddie, Lucille
Becker, Marie	Edwards, Margaret
Beckwith, Florence	Eisenmayer, Corinne
Berlin, Brooks	Ellert, Florence
Berny, Emma P.	Espy, Herbert
Beyl, Charles	Estes, Helen
Bloomfield, Gertrude	Felts, Ruth
Boice, Maud	Fossett, Anna
Bond, Bertha	Fossett, Harold
Bond, Elva Dell	Foster, Emory
Bose, Roy	Foster, Lois
Brown, Alice	Freeman, Azel
Brown, Vesta	Frew, Helen
Burgess, Evelyn	Freyberg, E.
Burgner, Margaret	Fuller, Ruth
Burnight, Ralph	Gatch, Sarah
Burr, Harriet R.	Geary, Inez
Byerts, Nettie	Giffen, Marguerite
Carlson, Elsie	Grimes, Ethel
Carleton, Ella	Gunning, Alma
Carpenter, Elizabeth	Gurney, Barbara
Corrigan, Juanita	Hale, Lova
Case, Irma	Hall, Arden .
Clay, Margaret	Hannum, Hortense
Coller, Clara	Harley, J. E.
Collins, Doris	Hargis, Helen
Comstock, Marion	Hazeltine, Mina
Constant, Claribel	Henshell, Irene
Copeland, Drew	Henrickson, Althea
Cook, Arline	Heron, Dorothy
Crabill, Hazel	Hinsdale, Ruth
Crowther, Rhea	Hinsdale, Willian
Damback, Leo	Hofert, Esther
Delano, Grace	Hoffman, E. Dow
Desmond, Kate	Hollabaugh, Julian
Diveley, Rhea	Holt, Esther
Doughty, Abbie	Hovey, Byron
Douglas, Robt. H.	Hubbard, Virginia



Hughes, Faye  
 Humphrey, Helen  
 Jackson, Bernice  
 Jamgochian, Araxie  
 Johnston, Valeria  
 Johnston, Margaret  
 Kelsey, J. C.  
 Kern, Helen  
 Kinder, Evelyn  
 King, Vida  
 Kirby, Charlotte  
 Knecht, Marjorie  
 Langston, Joyce  
 La Porte, Lura (Mrs.)  
 Laughren, Catherine  
 Lawler, Ita  
 Lieberg, Helenita  
 Leimkuhler, Mary  
 Lenvig, Bessie  
 Levering, Bessie  
 Levering, Fay  
 Levis, Mahlon  
 Lockett, Catherine  
 Lock, Mary  
 Long, Laura  
 Mackie, Mildred  
 Mason, Mildred  
 Mayo, Ella  
 McCrea, Iola  
 McCurdy, Bernice  
 McDonald, Annie  
 McDonald, Anita  
 Millar, Cheryl  
 Miller, Alfred  
 Miller, Elnora  
 Monfort, Harriet  
 More, Marguerite  
 Mortley, May  
 Muckian, Ruth  
 Myrick, Lydia  
 Neel, L. E.

Nelson, James G.  
 Nisbet, Eugene  
 Ogawa, K.  
 Olds, Margaret  
 Ornelas, Manuela  
 Padrick, P. A.  
 Parrish, Katherine  
 Paxton, Beatrice  
 Pearson, Galen  
 Peck, Marjorie  
 Perkins, N. W. A.  
 Perkins, V.  
 Pierce, Margaret  
 Peterson, Etta  
 Polaski, Irma  
 Pope, Z. M.  
 Porter, Margaret  
 Ratcliff, Mary  
 Rector, Wilhelmina  
 Richardson, Mattie  
 Riley, Lena  
 Robertson, Christine  
 Rogers, Kathleen  
 Rosin, Ethel  
 Rucker, Mrs. P. B.  
 Rycoff, Sarah  
 Samuels, Elizabeth  
 Sato, K.  
 Schurr, Dorothy  
 Sharp, E. T.  
 Shearine, Nellie  
 Smith, Mabel  
 Smith, Stephen  
 Smith, Wesley  
 Sneve, H. A. B.  
 Snowden, Mildred  
 Solomon, Dorothy  
 Spaeth, Walter  
 Steelman, S.  
 Steigleder, Bess  
 Stein, Feleciana

Stewart, Violet  
Stofflet, Mary  
Stofflet, Anna  
Strahle, Mabel  
Strait, Lila  
Sullivan, Emma (Mrs.)  
Swanson, Mamie  
Taylor, Allie  
Thielcke, Rosalie  
Thompson, Dorothy  
Thurston, Grace  
Trythall, Anna  
Tsuda, Kaguya  
Voorhees, Mildred  
Walker, Annie  
Walker, Dorothy  
Walker, Grace  
Ward, Katherine

Webster, Myrtle  
Weiss, Benj.  
Welch, Esther  
Wellborn, Mildred  
Wellman, C. R.  
Wendt, Alvin  
White, Narsa  
White, Rowena  
Wiebers, Hortense  
Wilcox, Paul  
Williams, Clinton W.  
Wilson, Jean  
Woleben, Marion  
Wood, Francis  
Woodbury, Anna  
Woodhead, Charlene  
Work, Isabel  
Zimmerman, Albert

## COLLEGE OF FINE ARTS

Adams, Alta A.  
Bandy, Mary  
Brack, Henry R.  
Braun, Margaret  
Bridges, Emma  
Brittan, Anna  
Chan, William H.  
Clark, Marie S.  
Cranston, Rena G.  
Culter, Edith W.  
Doolan, Winnifred  
Dooley, Leita H.  
Evans, Margot  
Forden, Lena  
Galloway, Genevra  
Gooch, Ruel  
Graves, Marian E.  
Hooker, Alta E.  
Huxley, Mildred  
Hylton, Jessie L.

Jones, Mary A.  
King, Mrs. W. D.  
Knecht, Helen  
Krick, Minnie A.  
Lambert, Stella  
Leaver, Marion  
Linardos, George  
McManus, Josephine  
Paramore, Helen M.  
Ramsey, Virginia C.  
Rowland, Ina Roxbury  
Rowland, Mary E.  
Rowland, Maude  
Scott, Carlotta  
Simpson, Florence  
Spalding, Gail W.  
Svenson, Lilian M.  
Trueblood, Mabel  
Ware, Henry A.  
Winkler, Avis

## UNIVERSITY HIGH SCHOOL

- Abajian, Samuel M.  
Anderson, Allen P.  
Anderson, Blanche A.  
Andrews, Rushworth C.  
Andrus, Edson A.  
Bacheller, Robert D.  
Ball, Louis K.  
Barnes, Elwin W.  
Barry, Ruth M.  
Bell, Bernard  
Benning, Margaret S.  
Blake, John  
Blake, Ruth  
Bledsoe, Lawrence E.  
Bogan, Ralston  
Brady, Florence K. L.  
Brignall, Delbert J.  
Burns, Albert H.  
Carlson, Emily V.  
Carr, William E.  
Carroll, Grace L.  
Chamberlain, Vernon K.  
Clark, Leonce D.  
Coleman, Margaret J.  
Cook, Lawrence B.  
Cooney, Elzetta M.  
Craig, T. R.  
Cranon, I.  
Davis, Ruth A.  
Davis, Julia M.  
Deegan, Pearl C.  
de Segrais, Philippe  
Dickerson, Gertrude L.  
Dickerson, Lorene M.  
Ehrenclou, Sigrid I.  
Estes, Helen J.  
Estes, Ruth E.  
Flynn, David J.  
Friedman, Harry  
Geyer, Dorothy L.  
Geyer, Floyd L.  
Gillett, Craig  
Gillis, Lindsay  
Gleiss, Esther G.  
Godsmark, Ruth E.  
Gray, Richard L.  
Greeley, Paul O.  
Green, Theodore McK.  
Groover, Sylva C.  
Haase, Oscar R. W.  
Haber, Philip  
Hayden, Charles C.  
Henshaw, Gaston D.  
Herington, Helen  
Hiscock, Loydra H.  
Hunt, Gale W.  
Jacoubowsky, Boris V.  
Jeffras, Nat G.  
Jenkins, Carl G.  
Jewett, Arthur E.  
Jones, John P.  
Joyce, Edwin J.  
Kendricks, Elmer  
Kenny, Robert W.  
Kingston, Edith M.  
Kinner, Maude C.  
Kinsman, Julia F.  
Klinge, Ray A.  
Knoles, Dorothy A.  
Knoles, Lorraine I.  
Koopman, Henry W.  
Krieglesteiner, Frieda M.  
LaPointe, Remi O'D.  
LeMare, Robert W.

Leverett, Charles R.  
 Lien, Deo S.  
 Loehr, John  
 Long, Marian L.  
 McCollum, Clarence H.  
 McCrory, Vale  
 MacIntosh, Doris  
 Macy, Charles D.  
 Marlowe, Madeline T.  
 Martin, Gertrude R.  
 Matthews, Frank L.  
 Mauer, Herbert  
 Messer, Norris  
 Meyers, Hazel L.  
 Miller, Daniel  
 Miller, Myron  
 Mills, Marguerite L.  
 Misch, Joe I. S.  
 Moore, Rutherford D.  
 Morrison, Mar A.  
 Niemeyer, Beryl  
 Olsen, Bess  
 Otto, Erich C.  
 Petifils, Raymond M.  
 Phillips, Jack A.  
 Redinger, J. Frank  
 Richards, Rose M.  
 Ro, Chinkook

Rogers, James H.  
 Ross, Hazel D.  
 Rudd, Will D.  
 Schoetl, August  
 Siegel, Seymour J.  
 Smith, Edgar L.  
 Smith, Frank L.  
 Soper, Howard L.  
 Speicher, Elizabeth McM.  
 Stanton, Elna C.  
 Stockton, William H.  
 Sutch, Arlington R.  
 Tanenbaum, Ned  
 Tanquary, Frances M.  
 Teeter, Daniel G.  
 Terry, Paul D.  
 Thomas, Abigail V.  
 Thompson, Russell  
 Thorne, Dorothy B.  
 Walls, Marjorie D.  
 Weathers, Clarence A.  
 Webster, Bernice G.  
 Weller, Katherine  
 Wheeler, Stanley A.  
 White, Horace W. B.  
 Wilson, Marjorie A.  
 Wilson, Ernestine F.  
 Wilson, Mary E.



## SUMMARY OF STUDENTS

## College of Liberal Arts:

Seniors .....	176	
Juniors .....	199	
Sophomores .....	253	
Freshmen .....	407	
Specials .....	388	
Graduates .....	338	
	<hr/>	1761
Summer .....		676
		<hr/> 2437

## College of Physicians and Surgeons:

Seniors .....	49	
Juniors .....	28	
Sophomores .....	37	
Freshmen .....	21	
Specials .....	4	
Post-Graduate .....	1	
	<hr/>	140

## College of Law:

Third Year Class .....	93	
Second Year Class .....	176	
Freshmen .....	330	
Post-Graduates .....	5	
	<hr/>	604
Summer .....		156
		<hr/> 760

## College of Dentistry:

Seniors .....	73	
Juniors .....	82	
Freshmen .....	109	
	<hr/>	264

Theology: .....	50	50
-----------------	----	----

**Pharmacy:**

Seniors .....	35	
Juniors .....	56	
		<hr/>
		91

**Music:** ..... 254 254

**Oratory:**

Private .....	51	
Class .....	210	
		<hr/>
		261

**Fine Arts:** ..... 40 40

**High School:** ..... 130

Grand Total .....4427

Deduct for names counted twice..... 709

Net Total .....3718

**Summer Session Registration for 1916:**

Liberal Arts .....	676
Fine Arts .....	13
Music .....	66
Dentistry .....	35
Law .....	156
Medicine .....	6
Oratory .....	60
	<hr/>
	1012



# INDEX

Abdominal Surgery, 227, 228.

## Admission Requirements:

Liberal Arts, 39;  
Graduate Dept., 53;  
Summer Session, 177;  
High School, 335;  
Medicine, 187;  
Law, 232;  
Dentistry, 262;  
Theology, 289;  
Pharmacy, 303;  
Oratory, 324;  
Music, 316;  
Fine Arts, 328.

Admission to the Bar: 231.

## Advanced Standing:

Liberal Arts, 41;  
Medicine, 190;  
Law, 233;  
Dentistry, 263;  
Pharmacy, 303;  
Fine Arts, 328.

Agriculture: 59.

Alumni Presidents: 14.

## Anatomy:

Medicine, 180;  
Dentistry, 271, 273, 274.  
See also under Zoology.

## Architecture:

Liberal Arts, 142;  
Fine Arts, 329.

Art and Design: 61.

Athletics: See "Physical Education."

## Attendance, Regulations concerning:

Liberal Arts, 50;  
Medicine, 192;  
Law, 236;  
Dentistry, 264;  
Pharmacy, 304;  
High School, 334.

Bachelor, Degrees of: See under "Degrees."

## Bacteriology:

Medicine, 210, 212;  
Dentistry, 281.  
See also under Biology.

Biblical Archeology, 293.

Bible: See under Religious Education.

Biology: Liberal Arts, 62, 65.

Botany: Admission, 46;

Liberal Arts, 67;  
Pharmacy, 305;  
High School, 344.

## Buildings and Equipment:

Liberal Arts, 157-165;  
Medicine, 178-187;  
Law, 231;  
Dentistry, 255-261;  
Pharmacy, 302;  
Fine Arts, 327.

## Business Regulations:

See under "Fees and Expenses."

Calendar: 6.

Catalogue of Students, 1916-17: 347.

Ceramic Art: 269.

## Certificates: See under "Courses

Leading to Degrees, Diplomas and Certificates," and "High School Teacher's Certificates."

Chemical Engineering: 156.

Chemistry: Admission, 45;

Liberal Arts, 68;  
Medicine, 205;  
Dentistry, 276;  
Pharmacy, 306;  
High School, 344.

Church History: 296.

Civil Engineering: 145.

Civil Government: (Admission), 45.

Classification of Students, 49.

Clinics: Medicine, 184;  
Dentistry, 254.

Commercial Law: Admission, 46.

Conference Board of Education, 14.

Conditions: Liberal Arts, 50;  
Medicine, 192.

Cost of Living: See under "Fees  
and Expenses."

Course of Study in Medicine, Reg-  
ulations Governing: 192.

Courses Leading to Degrees, Diplo-  
mas, or Certificates:

Liberal Arts, 47, 54, 56, 142,  
143, 152;

Medicine, 194-195;

Law, 233;

Dentistry, 264;

Theology, 289;

Pharmacy, 304;

Oratory, 324;

Music, 317;

Fine Arts, 329;

High School, 304.

Crown and Bridge Work: 269.

Debating: 165, 248.

Degrees:

Bachelor of Arts, 47;

Bachelor of Arts in connection  
with Doctor of Medicine, 48,  
195;

Bachelor of Arts in connection  
with Juris Doctor, 48, 234;

Bachelor of Divinity, 289;

Bachelor of Fine Arts, 328;

Bachelor of Laws, 234;

Graduate in Pharmacy, 304;

Bachelor of Science, 49;

Doctor of Dental Surgery, 264;

Doctor of Medicine, 194;

Master of Arts, 54;

Master of Arts in connection  
with Doctor of Medicine, 195;

Master of Laws, 233;

Juris Doctor, 234;

Pharmaceutical Chemist, 304.

Dentistry, College of: 253.

Departments of Instruction:

Liberal Arts, 59;

Medicine, 199;

Dentistry, 265;

Theology, 291;

Pharmacy, 304;

Oratory, 322;

Fine Arts, 328;

High School, 338.

Dermatology: 218.

Dietetics: 207.

Diplomas: See under "Courses lead-  
ing to Degrees, Diplomas and  
Certificates."

Directory: 8.

Discipline: Medicine, 192;

Law, 236;

Dentistry, 263;

Pharmacy, 314.

Doctor, Degrees of: See under  
"Degrees."

Drawing: Admission, 46;

Liberal Arts, 76;

High School, 345.

See also under "Art and De-  
sign," and "College of Fine  
Arts."

Economics: 78;

Admission, 46;

High School, 345.

Education: 81.

Electrical Engineering. 151.

Electro-Therapeutics: 219.

Embryology: 202.

El Rodeo: 168.

Engineering, Courses in: 49, 142-  
157.

Engineering Courses, Elective in  
Liberal Arts: 92.

English Bible: See Religious Edu-  
cation.

English Language and Literature:

Admission, 42;

Liberal Arts, 87;

High School, 338.

English Final Examinations: 93.

Equipment: See under "Buildings  
and Equipment."



- Evening Session, College of Law: 243.
- Examinations:
- Admission, 41;
  - Liberal Arts, 50;
  - Medical Admission, 188;
  - Medicine, 193;
  - Law, 236;
  - Dentistry, 264;
  - Pharmacy, 303.
- See also under "Calendar" and "Special Examinations."
- Extraction and Anesthetics: 284.
- Faculties, The: 17-37.
- Fees and Expenses:
- Liberal Arts, 168;
  - Summer Session, 177;
  - Medicine, 195;
  - Law, 247;
  - Dentistry, 284;
  - Theology, 300;
  - Pharmacy, 312;
  - Oratory, 325;
  - Music, 320;
  - Fine Arts, 332;
  - High School, 337.
- Fine Arts, College of: 327.
- Fraternities; 168, 251.
- French: 94;
- Admission, 44.
- General College Requirements for A. B.: 47.
- Genito-Urinary Diseases: 225.
- Geography, Physical: Admission, 46.
- Geology: 96.
- Geometry:
- Admission, 45;
  - High School, 343.
- German: 97;
- Admission, 44;
  - High School, 340.
- Gifts to the University: 173.
- Graduate Council, The: 53.
- Graduate Courses:
- Liberal Arts, 54;
  - Law, 246;
  - Pharmacy, 310.
- Graduate Department of Liberal Arts, The: 52.
- Graduation Requirements: See under "Degrees" and "Courses Leading to Degrees, Diplomas and Certificates."
- Greek: 73;
- Admission, 44;
  - Theology, 295;
  - High School, 341.
- Gymnasium: 164.
- Gynecology: 228, 229.
- Hebrew Language and History: 296.
- High School: 333.
- High School Teacher's Certificate, The: 56.
- Histology: 202, 204.
- History: 100;
- Admission, 45;
  - High School, 342.
- Homiletics: 297.
- Honors on Graduation: 52.
- See also under "Prizes."
- Hospital Facilities: Medicine, 184.
- Housing: 166.
- Hygiene: 212.
- Industrial History: Admission, 46.
- Intercollegiate Oratorical Contests and Debates: 165, 249.
- Italian: 104.
- Jewelry: 331.
- Journalism: 104.
- "Junior Standing" Defined: 49.
- Laboratories:
- Physics and Electrical Engineering, 158;
  - Biology, 161;
  - Marine Station, 162;
  - Chemistry, 162;
  - Geology, 163;
  - Medicine, 180;
  - Dentistry, 257.
- Latin: 74;
- Admission, 43;
  - High School, 341.
- Laryngology: 225.

- Law, College of: 231.
- Liberal Arts, College of: 39.
- Library Facilities:  
     Liberal Arts, 157;  
     Medicine, 186, 187;  
     Law, 232.
- Life Insurance Examination, 221.
- Location, Environment, etc.:  
     The University, 10;  
     Medicine, 178;  
     Law, 231;  
     Dentistry, 255;  
     Theology, 300;  
     Music, 315;  
     Fine Arts, 327.
- Marine Biological Station: 66, 162.
- Master of Arts, Degree of: 54;  
     With M. D., 195.
- Materia Medica:  
     Dentistry, 270;  
     Medicine, 213;  
     Pharmacy, 306.
- Mathematics: 109;  
     Admission, 45;  
     High School, 343.
- Matriculation: See "Admission."
- Medical Ethics and Economics: 221.
- Medical Jurisprudence: 219.
- Medicine, College of: See under "Physicians and Surgeons, College of."
- Medicine: 214.
- Medicine, History of: 220.
- Microscopy: 210, 211, 305.
- Mining Engineering: 156.
- Missions and Comparative Religion: See Religious Education.
- Missions, Foreign: 293.
- Mural Painting: 331.
- Museum, The: 158.
- Music, College of: 315.  
     Courses Accepted Toward Degrees of A. B., 110.
- Nervous and Mental Diseases, 218.
- Night School, College of Law: See under "Evening Session."
- Normal Classes: See under "Teachers' Courses," also under "Education."
- Obstetrics: 227.
- Officers of Administration of the University: 15.
- Operative Dentistry: 265.
- Operative Technique and Dental Anatomy: 267.
- Ophthalmology: 226.
- Options in Professional Schools: 48.
- Oral Surgery and Anesthesia: 272.
- Oratory, College of: 322;  
     Courses Accepted Toward the Degree of A. B., 111;  
     In College of Law, 248;  
     In College of Theology, 299.
- Oriental Studies and General Literature: 111;  
     Theology, 295.
- Orthodontia: 272.
- Otology: 225.
- Pathology: Medicine, 210;  
     Dentistry, 278.
- Pediatrics: 217.
- Pharmacology: 208, 209.
- Pharmacy, College of: 302.
- Pharmacy: 304.
- Philosophy, 114.
- Physical Education: 117;  
     High School, 346.
- Physicians and Surgeons, College of: 178.
- Physics: 122;  
     Admission, 45;  
     High School, 344.
- Physiology: 63;  
     Admission, 46;  
     Medicine, 208;  
     Dentistry, 275.
- Physiology, Hygiene and Sanitary Science: 308.
- Political Science: 125.
- Pottery: 331.

- Practice Court, The: 247.  
Pre-Legal Course: 234.  
Prizes: Liberal Arts, 172;  
    Medicine, 197;  
    Law, 251;  
    Dentistry, 265;  
    Fine Arts, 331.  
Proctology: 223.  
Professional Ethics: 283.  
Prosthetic Dentistry: 268.  
Psychology: 127.  
Public Speaking: Law, 248;  
    Oratory, 323.  
Publications, Student: See under  
    "Trojan" and under "El Ro-  
    deo."  
Pyorrhea Alveolaris: 270.  
Radiography: 273.  
Recitals: Oratory, 324;  
    Music, 348.  
Recommendations for High School  
    Teacher's Certificate, Depart-  
    mental Requirements: See un-  
    der Liberal Arts department in  
    question.  
Registration: See under "Admis-  
    sion."  
Religious Education: 129, 291.  
Religious Privileges: 165.  
Required Subjects: Liberal Arts,  
    47;  
    Civil Engineering, 146;  
    Electrical Engineering, 152.  
Residence Requirements:  
    Liberal Arts, 51;  
    Graduate Department of Lib-  
    eral Arts, 63.  
Rhinology: 225.  
Roentgenology: 219.  
Sacred Oratory: 299.  
Saturday Classes:  
    Oratory, 325.  
Scholarships:  
    Liberal Arts, 170;  
    Fine Arts, 331.  
Schedule, College of Law: 242.  
Science: Admission, 46.  
Sculpture: 330.  
Sociology: 134;  
    Theology, 298.  
Sororities: Liberal Arts, 168;  
    Law, 251.  
Spanish: 139;  
    Admission, 44;  
    High School, 342.  
Special Examinations:  
    Liberal Arts, 51;  
    Law, 236.  
Special Students:  
    Liberal Arts, 41;  
    Law, 236;  
    Dentistry, 263;  
    Pharmacy, 312;  
    Fine Arts, 328;  
    High School, 333.  
Student Organizations and Publi-  
    cations: Liberal Arts, 168;  
    Law, 250;  
    High School, 334.  
Summer Sessions: Calendar, 6;  
    Liberal Arts, 175;  
    Law, 246;  
    Fine Arts, 331.  
Surgery: 222.  
Systematic Theology: 297.  
Teacher's Course:  
    Music, 318;  
    Fine Arts, 330.  
    See also under "High School  
    Teacher's Certificate."  
Teaching, Practice in: 85.  
Theology, College of: 288.  
Theology, Pastoral: 297.  
Therapeutics: 213.  
Theses:  
    A. M., 55;  
    B. S. in Civil Engineering, 151;  
    B. S. in Electrical Engineering,  
    155.  
    Phar. B., 336.  
Toxicology: 205.  
Trigonometry:  
    Admission, 45.

Trojan: 168.

Trustees, Board of:

University, 12;

Dentistry, 13.

Tuition: See under "Fees."

"Units" Defined:

Admission, 40;

Liberal Arts, 47;

Medicine, 188.

University, The:

Board of Trustees, 12;

Historical, 9;

Advantages of Location, 10;

Government and Organization,

9.

University High School: 333;

Admission, 333;

Courses, 338;

Fees and Expenses, 337.

Vocation Subjects: Admission, 46.

Venice: 66.

Women's Clubs: 167.

Women's Halls: 166.

Y. M. C. A. and Y. W. C. A.:

Liberal Arts, 165;

Medicine, 197;

Dentistry, 254.

Zoology: 63;

Admission, 46.



















UNIVERSITY OF ILLINOIS-URBANA



3 0112 110346597